THE ANNUAL

OF THE

BRITISH SCHOOL AT ATHENS

No. VII.

SESSION 1900–1901

PRINTED FOR THE SUBSCRIBERS AND SOLD ON THEIR BEHALF BY

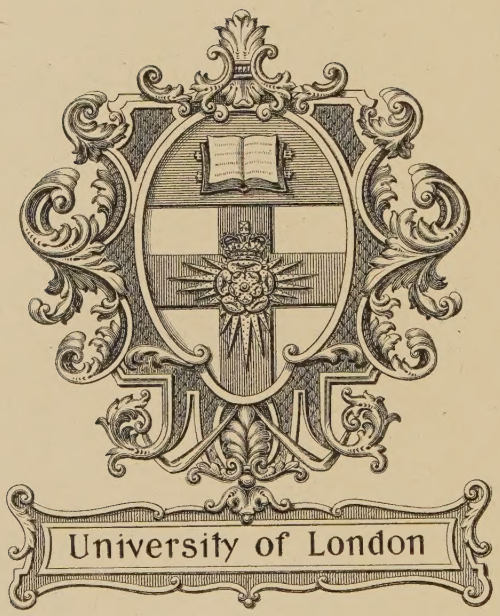
MACMILLAN & CO., LIMITED

LONDON

PRICE TEN SHILLINGS AND SIXPENCE NET

P.S.I.

63 Periodicals [British School]



SHL
WITHDRAWN

THE ANNUAL

OF THE

BRITISH SCHOOL AT ATHENS

No. VII.

SESSION 1900–1901

PRINTED FOR THE SUBSCRIBERS AND SOLD ON THEIR BEHALF BY
MACMILLAN & CO., LIMITED
LONDON

12502

THE BRITISH SCHOOL AT ATHENS.

PATRON.—HIS MAJESTY THE KING.

MANAGING COMMITTEE, 1901—1902.

EDWIN FRESHFIELD, ESQ., LL.D.
SIR RICHARD JEBB, Litt.D., D.C.L., LL.D., M.P. } *Trustees.*
GEORGE A. MACMILLAN, ESQ.

D. B. MONRO, ESQ., M.A., Provost of Oriel. Appointed by the University of Oxford.
PROFESSOR WILLIAM RIDGEWAY, M.A. Appointed by the University of Cambridge.
SIDNEY COLVIN, ESQ., M.A. Appointed by the Hellenic Society.

ARTHUR J. EVANS, ESQ., LL.D., F.R.S.
PROFESSOR ERNEST GARDNER, M.A.
PROFESSOR PERCY GARDNER, Litt.D.
MISS JANE E. HARRISON, D.Litt., LL.D.
F. HAVERFIELD, ESQ., M.A.
D. G. HOGARTH, ESQ., M.A.
J. LINTON MYRES, ESQ., M.A. } Appointed by the Subscribers.
PROFESSOR H. F. PELHAM, M.A., President of Trinity College, Oxford.
F. C. PENROSE, ESQ., Litt.D., D.C.L., F.R.S.
CECIL HARCOURT SMITH, ESQ., LL.D.
PROFESSOR J. S. REID, Litt.D.
PROFESSOR CHARLES WALDSTEIN, Litt.D.

WALTER LEAF, ESQ., Litt.D., *Hon. Treasurer*, 6, Sussex Place, Regent's Park, N.W.
WILLIAM LORING, ESQ, M.A., *Hon. Secretary*, 2, Hare Court, Temple, E.C.

DIRECTOR 1901—1902.

R. CARR BOSANQUET, ESQ., M.A., Trinity College, Cambridge.

SHL
BIBL. UNIV.
WITHDRAWN

TABLE OF CONTENTS.

		PAGE
1. A. J. Evans.	The Palace of Knossos	1
2. D. G. Hogarth.	Excavations at Zakro, Crete	121
3. W. Boyd Dawkins.	Skulls from Cave-Burials at Zakro	150
4. A. Wilhelm.	An Athenian Decree	156

Annual Meeting of Subscribers	163
Income and Expenditure 1900–1901	174
Donations and Subscriptions 1900–1901	176
List of Subscribers	178
Lists of Directors, Students, and Associates	183
Methods of Work and Teaching	187
Rules and Regulations of the British School at Athens . . .	188

LIST OF PLATES.

FACING PAGE

I. Knossos, Crete.—Ground Plan of the Palace, showing its Extent as excavated in 1901 1

II. Northern Border of Palace, West of Northern Entrance-Way . 96

III. Kato Zakro, Crete.—Map of the Eastern Spur or Lower Town . 129

IV. Kato Zakro, Crete.—(1) Sponge Boats; (2) Cyclopean Tower; (3) Outer Corner of House A; (4) Interior of House A . 134

V. (1) House E; (2) House I; (3) House I xiv. showing Vases; (4) House I: Kitchen and Drain 141

VI. Skull from Cist at Zakro 150

LIST OF ILLUSTRATIONS IN THE TEXT

THE PALACE OF KNOSSOS :—

PAGE

Fig. 1. Angle of West Wall showing Sockets of Wooden Struts . . 3
Fig. 2. View looking S. towards the first N.W. Angle 4
Fig. 3. Linear Characters on Vase and Clay Tablets compared . . 10
Fig. 4. "Rustic" Vases showing Kamares Tradition, from Basement Room of S. Terrace 11
Fig. 5. Haematite Weight 13
Fig. 6. Coloured Bas-Relief in gesso duro representing Male Torso with Fleur-de-lis Collar 17
Fig. 7*a*. Clay Seal-Impression with Minotaur 18
Fig. 7*b*. and 7*c*. Gems from Knossos showing Minotaur . . . 19
Fig. 8. Restored Plan of Western Upper Megaron and the Hall of the Jewel Fresco 23
Fig. 9. Impression of Signet-Ring showing Lion-guarded Goddess and Shrine 29
Fig. 10. Stone Drum 32
Fig. 11. View of Room showing plaster Table, Dais, and Woman's Seat . 33
Fig. 12. Stone Weight 42
Fig. 13. Steatite Relief of Archer 44
Fig. 14. Painted Pottery of late Kamares Class from 'Kasella' . . 47
Fig. 15. Double and Votive Axes 53
Fig. 16. Parts of a frieze of porphyry-like stone with Reliefs . . . 55
Fig. 17. Fresco-painting of Girl 57
Fig. 18. Northern Bath looking N.W. 61
Fig. 19. Plan of Southern Bath 62
Fig. 20. Section of Rubble Wall 64
Fig. 21. Lid of Alabastron with Cartouche of Hyksôs King Khyan . . 65
Fig. 22. Section of North Entrance Way 69
Fig. 23. Plan of the Northern Entrance 71
Fig. 24. The North-East Magazines and Contents 74

THE PALACE OF KNOSSOS (*continued*) :—

PAGE

Fig. 25. The Royal Gaming-Board 79
Fig. 26. Twin Vase and other Vessels 85
Fig. 27. Double-Walled Pot and other Vessels 86
Fig. 28. Knobbed Vases 86
Fig. 29. High Relief in painted gesso duro 89
Fig. 30. Great Stone Amphora 91
Fig. 31. Relief on Part of Steatite Pyxis showing Boxer . . . 95
Fig. 32. The Hall of the Colonnades: Restored Sections . . . 106
Fig. 33. Knossos: Halls on East Slope restored 111
Fig. 34. South-West Corner of Megaron of Double-Axes . . . 112
Fig. 35. West-End of Megaron restored 113
Fig. 36. Perspective Sketch of Megaron of Double-Axes and Staircase beyond 116

EXCAVATIONS AT ZAKRO, CRETE :—

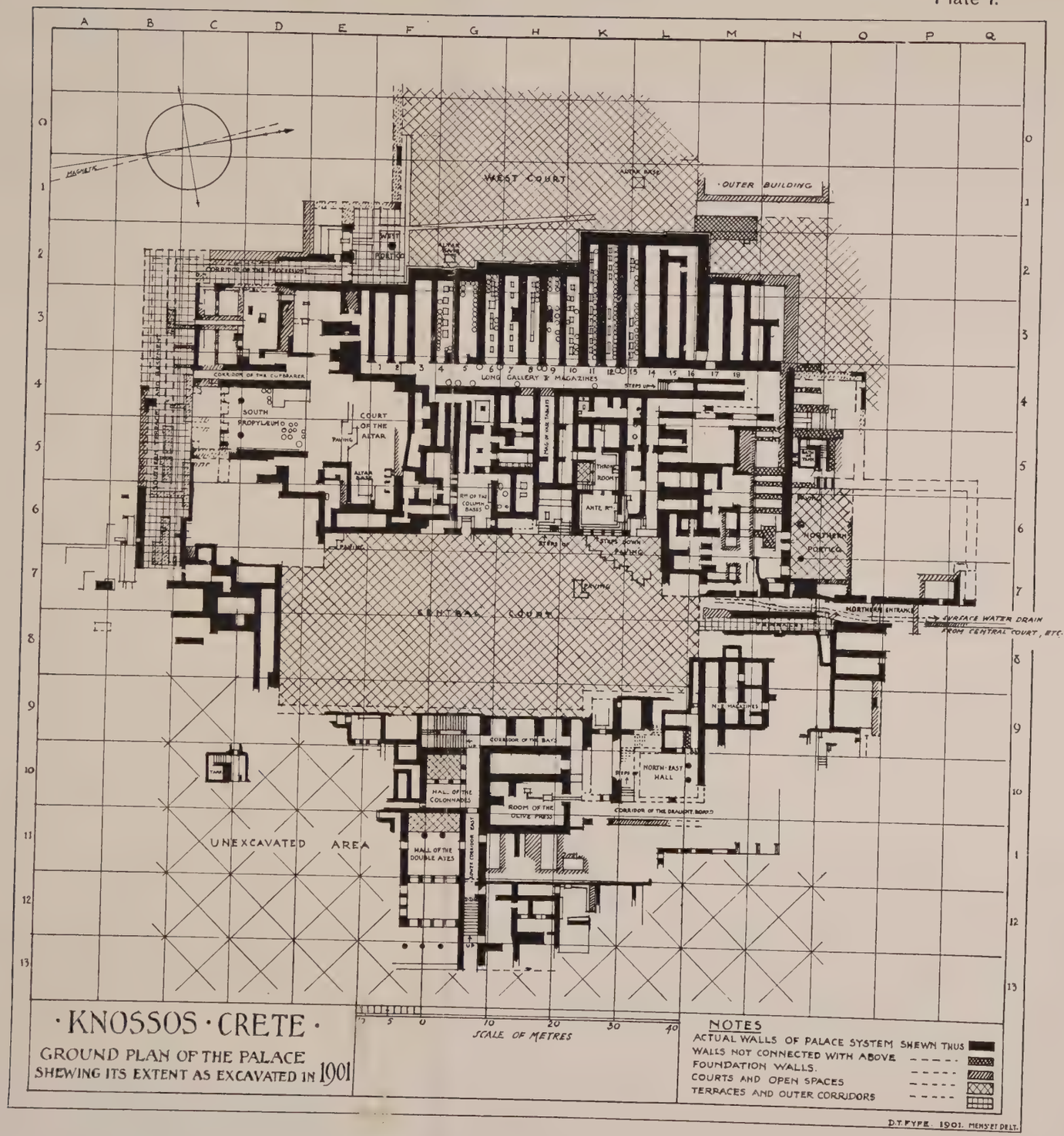
Fig. 37. The Eastern Half of Crete (Map) 122
Fig. *A*. Sketch Map of the Zakro Delta. 125
Fig. 38. Types of pierced clay Objects from the Pits 127
Fig. 39. Characters incised on ditto 127
Fig. 40. Characters on two Potsherds and two Weights 128
Fig. 41. Lamps from Pit 2 128
Fig. 42. Strainer and cross-handled 'Fruit-Stand' Vase 128
Fig. *B*. Mycenaean Houses 131
Fig. 43. Typical painted Vases from House *A* 132
Fig. 44. Bronze Knife, Mattocks, and Drill, from House *A* . . . 132
Fig. 45. Minotaur Types on clay Sealings from House *A* . . . 133
Fig. 46. Bronze Hoard from House *C* 135
Fig. 47. "Altar" from House *M* 136
Fig. 48. Section through House *G* 137
Fig. *C*. Mycenaean Houses. 138
Fig. 49. Sketch of Entrance to House *G* from within 139
Fig. 50. Sections through House *I* 140
Fig. 51. Vase from House *I*. Room xiv. 141
Fig. 52. Typical Vase Forms from early Cave Burials 144

AN ATHENIAN DECREE :—

Fig. 53. 161

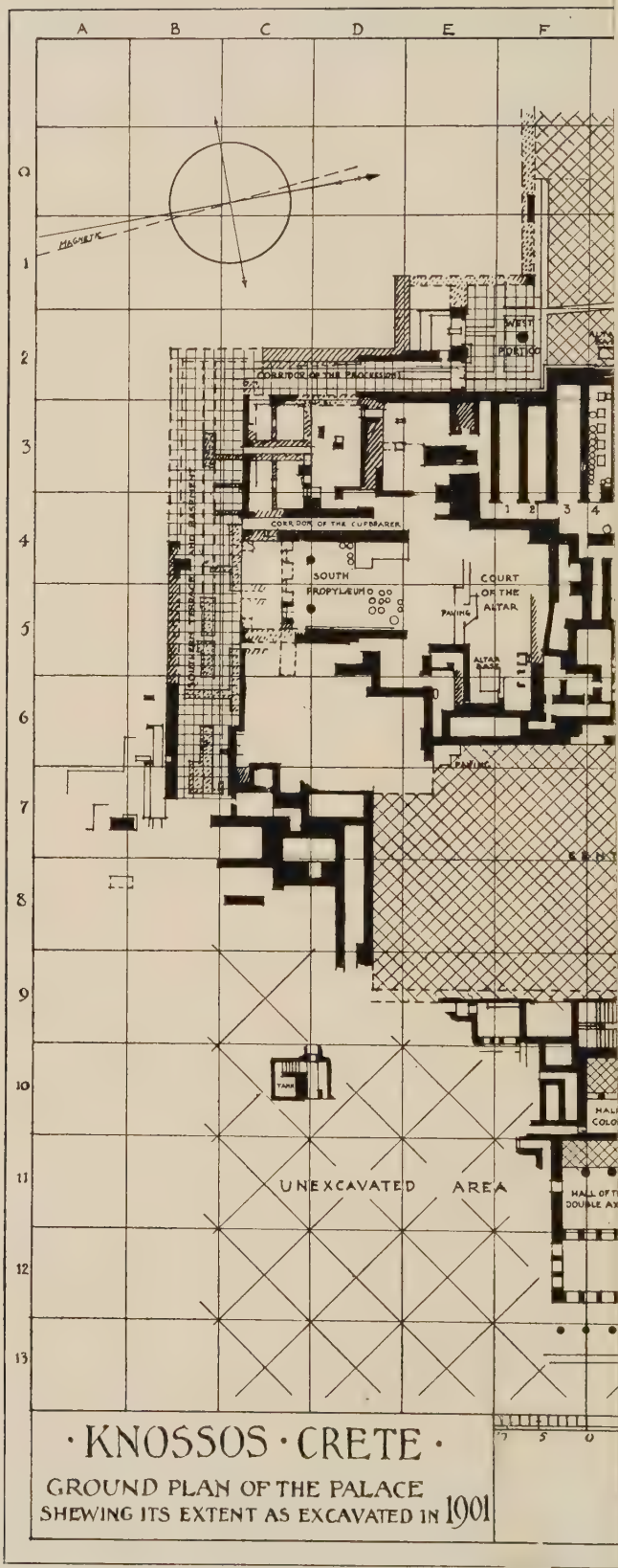
PREFATORY NOTE.

IT had been intended to include the Report on the School's excavations at Praesos in this number, but it is unavoidably postponed to the next. The Report on Knossos, contributed by Mr. A. J. Evans, has been for some time in private circulation.



GROUND PLAN OF THE PALACE OF KNOSSOS, SHOWING ITS EXTENT AS EXCAVATED IN 1901.

[*Face p.* 1.



GROUND PLAN OF THE PALACE OF K

THE PALACE OF KNOSSOS.

Provisional Report of the Excavations for the Year 1901.

By Arthur J. Evans.

---

§ 1.—The Campaign of 1901.

The work of excavation on the Palace site at Knossos was re-opened on February 27, 1901, and continued till June 17. Various supplementary operations connected with the shoring up and underpinning of the walls of large halls brought to light on the south-east of the site, the completion of the roofing-in of the Throne Room, and similar works of conservation entailed the continued employment of a large number of workmen till the beginning of July. Throughout the excavations I again secured the valuable services of Dr. Duncan Mackenzie as my assistant in directing the works, and of Mr. D. T. Fyfe, formerly architect of the British School, in preparing architectural plans and drawings.

The building itself, as will be seen from the present Summary Report, took an even vaster development than it was possible to foresee, and as, for the purpose of delimitation, it was necessary besides to make a thorough exploration of the surrounding zone on its western, northern and eastern borders the work necessitated the employment of a large number of men. Throughout a great part of the season as many as two hundred workmen were constantly employed.

Besides the opening out of new quarters of the Palace, a good deal of attention was directed towards the more exhaustive exploration of certain parts of the building already partially excavated in 1900, and at the same time towards the solution of some of the problems suggested by the work already executed. Considerable labour was devoted to the thorough examination of the south-west angle of the building, the continuation of

the Corridor of the Procession and its relation to the Southern Terrace and Propylaeum. North of the Propylaeum, again, the walls of a series of chambers were tested and re-examined with a view to defining the outline of the upper halls or "Megara" that once undoubtedly rose above them. A series of the "Kaselles" beneath the floors of the Magazines were opened and their contents thoroughly sifted. A large number of additional shafts were also sunk both within and without the walls of the Palace in order further to explore the underlying Neolithic settlement.[1]

Of the works of conservation undertaken the most important was the enclosing and roofing-in of the Throne Room—a work rendered urgent by the effect which exposure to the weather was already beginning to produce both on the throne itself and the seats and parapet. In order to support the roof it was necessary to place some kind of pillars in the position formerly occupied by the Mycenaean columns, the burnt remains of which were found fixed in the sockets of the stone bench opposite the throne. This necessity and the desire to avoid the introduction of any incongruous elements amid such surroundings determined me to reproduce the form of the original Mycenaean columns. An exact model both for the shape and colouring was happily at hand in the small fresco of the temple façade, and the work was successfully executed under Mr. Fyfe's superintendence.

In order to protect the room from wanton damage we were further reluctantly obliged to place a substantial iron railing and door across the entrance. For this, unfortunately, no Knossian model was forthcoming, and the best that could be done was to get a native smith of Candia to make a scroll-work railing of wrought iron of the kind that it is usual here to place before Mahometan shrines, the spiral designs of which at least are curiously in harmony with Mycenaean patterns. About the middle of the opening in order to give support to this barrier a stone pillar was set up in a socket of the pavement where a wooden one had once stood.

§ 2.—THE WESTERN COURT, PORTICO, AND ENTRANCE.

One of the leading features of the excavation was the great increase of area gained by the Western Court. The whole line of the West Wall of

[1] A short report of the results of the exploration of this Neolithic Settlement was made by me to the Anthropological Section of the British Association (Glasgow Meeting, September 1901). An abstract of this is printed in the Annual Report of the Association, and in *Man*, December 1901 (No. 146)

the Palace was now brought to light to a point nearly twice as far to the north of the West Portico as the portion excavated in 1900. As before, this wall formed for the most part the backing of a series of Magazines, six of them longer than any yet uncovered. At this point the course of the West Wall is again marked by one of the shallow recesses already noted in the earlier excavated part, which also recur in the outer wall of the Palace at Phaestos. After passing these Magazines, where the outer wall attains its greatest projection west, it again took a rectangular turn back and reached

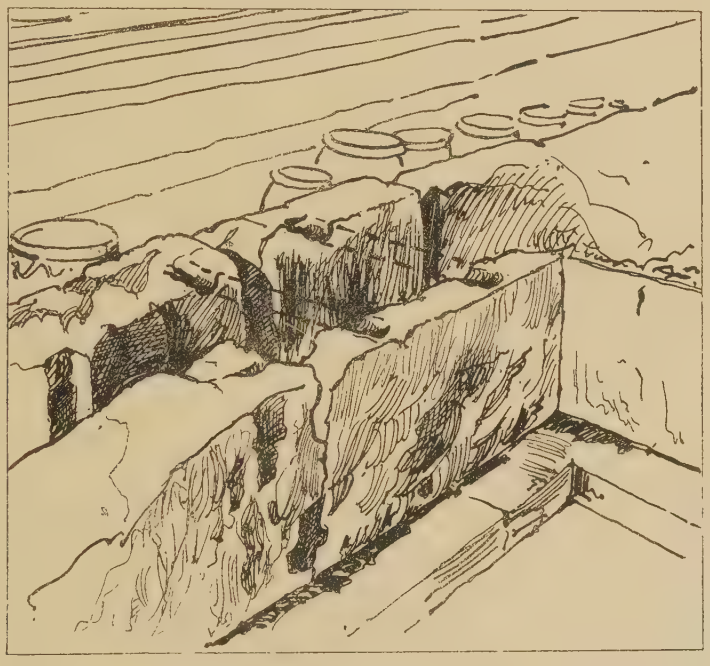


FIG. 1.—ANGLE OF WEST WALL, SHOWING SOCKETS OF WOODEN STRUTS.

the extreme north-west angle of the building in a line with its starting point outside the West Portico.

Behind the Long Magazines the method followed in the construction of this Western Wall was very perceptible and revealed that curious economy of material so characteristic of the builders of the Palace. The great gypsum slabs visible both in the outer and inner face of this wall were not in fact continuous. The actual thickness of these did not exceed 50 centimetres, and between them there was a space of about a metre filled

with clay and rubble. At the same time, to give compactness to the whole, wooden struts were set between them, the sockets of which were to be seen on the inner sides of the great slabs (see Fig. 1).

The extreme northern end of the West Wall could only be traced by means of the foundations, hereabouts about a metre and a half deep and consisting of a dry walling of smaller limestone blocks resting on a plinth.

FIG. 2.—VIEW LOOKING SOUTH TOWARDS THE FIRST NORTH-WEST ANGLE OF PALACE.

The angles of this, as may be seen from Plate II. and Fig. 2, were very finely preserved. Proceeding southwards the depth of these foundations gradually decreased with the rise of the ground.

Against the north-west angle of the wall, outside the Long Magazines,

had been set an oblong structure of large limestone blocks which had the appearance of very primitive build (see Fig. 2). It is probable, however, from its position against the corner of the wall, that this massive platform was really a later structure carried out with the object of supporting the foundations of the building at this angle, where, as is shown from the remains of frescoes, a stone frieze and other architectural fragments, there was evidently an important superstructure.

Separated from this massive buttress by about a metre's space were the foundations and lower part of the walls of an elongated rectangular building divided into three main compartments, the south end of which forms a limit to the Western Court on this side. The upper floors here were of Mycenaean date, but in the lower part of the chambers were found abundant fragments of pottery of the pure Kamáres Period, including specimens of the fine embossed "egg-shell" ware which represents the highest ceramic product of pre-Mycenaean Crete, and was evidently copied from prototypes of repoussé metal-work.

The relics of the best Kamáres Period are conspicuous by their absence in the chambers of the Palace itself, and the preservation of this building in such immediate proximity to the wall and actually abutting on the great West Court may possibly indicate that it served some religious purpose. It is noteworthy in this connexion that a double axe was painted on one of the fragments, the bottom of a vase, recalling a similar symbol on a vase found in a house to the west of this spot.[1] The double axe in a specially votive form reappears as on the Mycenaean pottery of the "Palace style."[2]

In the Western Court, opposite the south end of this building and 6·60 metres distant from the shallow recess already described in the wall behind the Long Magazines, was unearthed a second altar-base of limestone blocks 1·90 m. × 1·72 in dimensions,[3] closely resembling that already noted nearer the West Portico. Starting from the centre of the western wing of this Portico and running somewhat diagonally north-westwards so as to avoid the great angle of the West Wall is a curious narrow causeway more carefully paved than the rest of the Court and slightly raised above its level. Its appearance at first sight suggests the base of an earlier wall, but that it is in fact a causeway is now placed beyond a doubt by the remarkable parallel discovered at Phaestos. There, running in the same diagonal

[1] D. G. Hogarth, *B. S. Annual*, 1900, pp. 79, 80: *J. H. S.* 1900, p. 87.
[2] See below p. 53. [3] Somewhat defective on north-west side.

fashion across the Court that lies outside the western wall of the Palace, is a precisely similar causeway leading to a step-way that ascends the tiers of seats that command the northern end of the Court. Thus at Phaestos we see a similar causeway, leading presumably from a gate of the Palace, serving as an avenue of approach to what seems to have been a prehistoric theatre—arranged like a grand stand—overlooking a very ancient altar. Whether any structure analogous to this archaic theatre existed at Knossos it is impossible now to say, but the parallelism of altars and causeways is very suggestive.

There can at least be little doubt that this Western Court outside the Palace Walls must have formed the great gathering-place, or *Agora*, for the citizens of Mycenaean Knossos. From north to south it extends some 50 metres, but on the western side no definite line of delimitation exists, and it seems to have an almost unlimited extension. The rough paving may possibly have been originally covered with a kind of cement, as was certainly the case with the area beneath the Portico. Where a test pit was dug into it, at a point about 30 metres west of the first-discovered altar-base, it was found immediately to overlay a stratum containing first Mycenaean and then Kamáres sherds. Nearer the West Wall, however, Kamáres sherds were found immediately below the pavement and went down about 2 metres to the Neolithic stratum. This seems to indicate that the Agora had been many centuries in use, during which its level had gradually risen, the stone pavement, however, for the most part dating from the earliest period of the building.[1] This Court has a distinct Western slope.

Whether or not the Agora was overlooked originally by raised seats like the Western Court at Phaestos, the long plinth at the base of the West Wall, also paralleled at Phaestos, must at all times have afforded an admirable sitting place for a large number of persons, and indeed was frequently used for this purpose by my Cretan workmen. It does not require a great stretch of imagination to see the Elders of a Mycenaean Assembly seated in the same place, while the King himself sate at the gate on the Seat of Judgment in the stately Portico beyond.

It will be remembered that this Portico gave access to a double entrance, one doorway leading directly to the Corridor of the Procession, while the other opened on a separate chamber. A re-investigation of the founda-

[1] In some places, however, the Kamáres deposit began immediately beneath the pavement.

tions has made it clear that the side chamber, which communicated with the Corridor by means of a small lateral doorway, was of somewhat larger dimensions than had been at first made out. This chamber was surely something more than a mere "Porter's Lodge." It is at least a probable conjecture that this room with its stately portal facing the great Western Court was on such occasions specially reserved for the royal use.

The Portico itself must have been an imposing structure. The column-base in the centre of its opening has a diameter of 1·25 metres, and taking as a guide the proportions of the pillars depicted in the "Temple" fresco, the wooden column which rose above it and supported the architrave would have attained a height of 5 metres or over sixteen feet. The architrave must also have been supported by substantial piers on either side. On the east side indeed the solid gypsum block which formed the base of this is visible with a dowel hole for an upright wooden beam. The pavement within the Portico, as will be seen from the plan (Pl. I.), is divided into square and oblong spaces, formerly coated with red-coloured cement, by lines of slab pathway, one branch of which finds its continuation in the causeway already described, and in another similar gangway which starts from the latter at right angles in a westerly direction. Two other branches of the pathways within the Portico lead through the middle of the doorways, one of these prolonging itself in the central line of slabs that run along the Corridor of the Procession.

§ 3.—THE CORRIDOR OF THE PROCESSION TRACED TO THE S.W. CORNER AND PROLONGED, FROM INDICATIONS, ALONG THE SOUTHERN TERRACE.

The rapid fall of the ground beyond the south-western angle of the Palace had entailed the almost complete denudation of the upper part of the neighbouring structure. It was, therefore, the more necessary to make a very careful exploration of the remains of foundations hereabouts, as a guide for reconstructing the upper lines. Happily, by very reason of the slope of the ground, the builders had here laid the foundations of exceptionally massive blocks, and the line of a thick outer wall forming the continuation of the west wall of the Corridor of the Procession was clearly indicated. West of these foundations were others of a less important character which evidently had belonged to private houses built here close

up against the Palace wall, while a little beyond was the better preserved house with gypsum pillars excavated by Mr. Hogarth in 1900.[1]

In my previous Report the conjectural view had been already advanced that the Corridor of the Procession, after continuing to the south-west corner of the Palace above the lower part of the Southern Terrace, "took a turn at right angles, and following the top of the Terrace wall afforded access to the Southern Propylaeum." A valuable corroboration and amplification of this view is now afforded, not only by the existence of foundations clearly marking the prolongation of the stately entrance Corridor to the south-west angle of the Southern Terrace, but by other circumstances. Below the point where the Corridor must have abutted on the Terrace occurred a fresco fragment consisting of the foot and the corner of the robe of a male figure similar to those of the "Procession" found on the walls of the Corridor nearer the Western Entrance. Near the same spot were also found pieces of the characteristic blue slate slabs that form the border of the Corridor pavement, and many other examples of the same occurred at various spots above the floor level of the Southern Terrace—a striking indication of the continuation of the Corridor along its upper floor. A supporting wall, which seems originally to have run with small interruption along the middle of the basement of the Southern Terrace, was apparently built with the special object of supplying a base to an upper wall or colonnade which would be the continuation of the outer wall of the Corridor. It is probable that the outer face of the Corridor above this supporting wall formed a long colonnade opening on a flat terrace representing the roof of the outer division of the basement. Opposite the centre of this Colonnade was the broad opening that gave access to the Southern Propylaeum, and thus to upper *Megara* beyond, the existence of which can now be ascertained with sufficient certainty. That a similar system of wall decoration was common to all this avenue of approach from the Western Entrance is indicated by the finding of the Cup-Bearer fresco, a figure analogous to those of the Corridor of the Procession, at the back of the Southern Propylaeum in a position which showed that it had fallen backwards from its inner wall.

There can be little doubt that the Corridor and Colonnade continued east past the approach to the Propylaeum, and afforded a direct access to the Central Court and perhaps to the important *Megara* beyond it. Similar

[1] *B.S. Annual*, 1900, II. 79.

remains of blue slate paving, found above the floor levels below, marked a part at least of this continuation.

§ 4.—THE SOUTH TERRACE BASEMENT AND ADJOINING ROOMS AND GALLERIES.

Reason has been given above for supposing that the upper part of the South Terrace consisted of a long Gallery or Verandah which formed in fact the continuation of the Corridor of the Procession and opened south, perhaps by a wooden colonnade, on a flat stretch of roof. Below all this were basement rooms and galleries, a part of which had been explored at the beginning of the season of 1900. The outer limit below is formed by a long line of fine gypsum blocks resting on a slightly projecting plinth of limestone slabs, which the renewed exploration of this front made it possible to follow in the direction of the south-west corner of the Palace. The fact that this wall showed very little traces of foundations strongly corroborates the view already expressed that, above, it merely supported an outer line of terrace roof.

Between this and the innermost supporting wall of the Terrace were, as already noted, remains of a central construction parallel to the inner and outer lines, apparently intended to support the colonnade of the verandah above. The main terrace wall, within this, though a good deal reconstructed in places, showed near its base layers of fine limestone blocks, the prevailing double axe symbol on which marked them as belonging to the earliest period of the building. This wall had at later times been buttressed up in several places by masses of very poor rubble masonry; as however the superincumbent structures which this had once helped to support no longer existed it was possible to remove this later work and expose the original surface of the inner terrace wall.

Already when the excavations were first begun there were visible in the face of this wall two narrow openings leading to small inner galleries. The removal of the later rubble coating now brought into view three more such galleries, one on the extreme east and two to the west of those already visible. It was clear that the two more westerly of these, one of which ran immediately under the Corridor of the Cupbearer, had given access to inner basement rooms which had apparently served as cellars. In contiguity to the most westerly of these there were now

opened out two small chambers of this class with which it had probably had communication. The floor level of these chambers, though somewhat over two metres below the upper Palace level at this spot, was at least a metre higher than that of the basement area of the South Terrace proper, and we must therefore suppose that there were originally steps up from the subterranean passage.

In the innermost of these chambers was found a group of plain clay vases, one of which was of exceptional interest from the fact that it bore on its shoulders an inscription which had been incised while the clay was still wet. The inscription, the first found here on a vase, is written in the ordinary linear script of the Palace—a slight variation being noteworthy in the third letter, here reversed and written like an S. In Figure 3 it will be found compared with typical forms as seen on tablets of Mycenaean date.

The vase itself on which this graffito inscription appeared was of a tall elongated form, except for its two handles recalling the shape of a Chinese jar. With it was found another similar vase (Fig. 4) and several other vessels. They were all of the same rough light-coloured clay and uncoloured, except that one two-handled jar was broadly streaked with a kind of triple spray of brown. At the bottom of a barrel-shaped vessel with tripod base, a type of which there were two or three examples, was found a grey deposit with fishes' vertebrae, showing that it had been used to store food. In this connexion it may be mentioned that an intaglio found on the site of Knossos shows a fisherman holding in either hand a fish and a polyp. In Crete, at least, fish formed a regular part of the Mycenaean dietary.

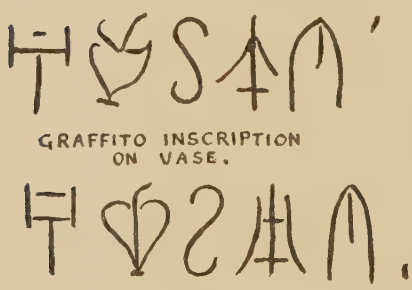


FIG. 3.—LINEAR CHARACTERS ON VASE AND CLAY TABLETS COMPARED.

The types of the "rustic" vases found in this chamber derive great interest from the fact that they one and all represent a degenerate "Kamáres" tradition, although, as the character of the inscription shows, belonging to a good Mycenaean period. In this respect the Amphoras with double spout and mouth of oval section, the barrel-shaped vases with a

tripod base, and a two-handled spouted bowl, are very characteristic. The cups exhibit transitional forms between the higher, often brilliantly painted, Kamáres type and the somewhat shallow receptacles of plain clay of which such vast heaps are found in the votive deposits of Mycenaean date in the Dictaean Cave and elsewhere. It will be seen that large deposits of vessels of the same transitional class were found in the chambers and magazines of the east slope, and this "rustic" fabric may with great probability be regarded as the work of slaves and handicraftsmen of the old indigenous stock who lived within the Palace walls under

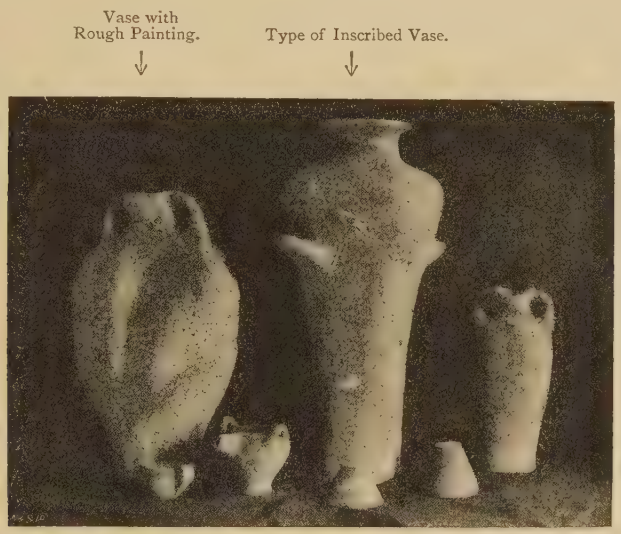


FIG. 4.—"RUSTIC" VASES SHOWING KAMÁRES TRADITION, FROM BASEMENT ROOM OF SOUTH TERRACE.

the Mycenaean lords. The appearance of a linear inscription on a pot of this class suggests many interesting questions. It must at least be taken as a proof of a considerable diffusion of the art of writing.

The comparatively early Mycenaean date of the contents of this storeroom is shown not only by the Kamáres tradition in the forms of the vases but by certain structural phenomena. The vases lay in a layer of burnt wood pointing to the effect of a fire in this part of the Palace, and a little above the floor level on which they lay were the foundations of rubble walls belonging to the latest period of occupation. It is also to be observed that the gallery by which this chamber had been

originally reached from the basement of the South Terrace had had its mouth blocked at this same period by a rubble supporting wall.

Very different from this are the contents of the basement rooms and passages of the Southern Terrace itself. There the rubble walls inserted at a late period to buttress up the main south wall, together with certain contemporary chambers of the same poor construction as these buttress walls and partly built on to them, serve to bring out a very definite line in the archaeological stratification of the site. Along the foot of these later walls and in the small chambers, of which four were brought to light in the western half of the basement, were found a series of Mycenaean vases of a decidedly more recent type than those of the fine Palace style. In a room to the left of the entrance of the basement passage which runs immediately under the Corridor of the Cup-bearer sixteen Mycenaean vases were found in a more or less perfect condition, just as they were left at the latest moment of the occupation of this part of the site. The larger of these were placed on stone slabs, the smaller on pebbles. Other similar vases were found in the chamber adjoining this on the west. Among the classes represented, besides plain bowls and some rather coarse jars with flowing streak decoration, were the usual two-handled pedestalled cups of the champagne-glass form, single-handled jugs with waved and spiral pattern, and several "stirrup vases" (Bügelkannen) of high oval form and somewhat heavy fabric, with octopus designs, and large single-handled mugs with incurving sides of a type very characteristic of the tombs of Ialysos.[1] It may be remembered that among the vases of similar ceramic style found in the passage of the same basement, a little farther east, was a three-handled pyxis, in form and ornament almost identical with one from the same Rhodian cemetery.[2] More than this, the character of the decoration on the vases from these basement chambers, and others of similar character found elsewhere on the site, closely corresponds with that of the Mycenaean vase fragments from Tell-el-Amarna, among which, however, the octopus design seems to be wanting.

The trend of this evidence is to take us to the Fourteenth century B.C. for these latest ceramic products of the site. There was no trace

[1] Furtwängler und Löschke, *Mykenische Vasen*, Pl. ix. (56, xxxv.). Two examples of similar types from Ialysos are in the Ashmolean Museum. Another vase of this form from Nauplia is given, *op. cit.* Pl. xxi. 150.

[2] *B. S. Annual*, 1900, p. 8. Furtw. u. Löschke, *op. cit.* Pl. ix. (55, xxxii).

in the later chambers and passages of the Southern Terrace basement of any example of the finer Palace style. It will be seen, too, that the room of the Stirrup Vases (Bügelkannen), to the north of the building where similar ceramic types occurred, is now shown to overlay an earlier Mycenaean floor-level. Their sporadic occurrence indeed and proved posteriority make it more and more probable that at the time when these vessels were in use only a fraction of the site was still inhabited, and that the larger part of the Palace, together with the monuments of its most flourishing artistic period, was already in ruins.

On removing the later wall which blocked the entrance of the subterranean gallery that ran beneath that in which the Cup-Bearer fresco lay, an interesting find was made on the old floor level below. This was a haematite weight, with a flattened surface below, of the somewhat spindle-shaped form shown in Fig. 5. Its interest lies in the fact that it corresponds both in form and material with a class of early weights found both in Palestine and Egypt. An example from Samaria in the Ashmolean Museum and dating from the seventh or eighth century B.C., bears a Semitic inscription showing that it was a quarter *nsf*,[1] a kind of weight which recurs elsewhere in Palestine, but the name of which does not seem to be capable of a Hebrew derivation. It weighs 2·540 grammes (39·2 grains), so that the unit of which it is a quarter would have scaled 10·16 grammes (c. 157 grains), an amount which bears no obvious relation either to the Babylonian or the Egyptian standards. A haematite weight, however, of the same type from Egypt weighing 46·6 grammes (about 704 grains), fits well with the Egyptian series and may be regarded as the equivalent of half an "Uten" of the lighter class, or five "Kats." The Knossian example on the other hand, which is 12·6 grammes (195 grains),

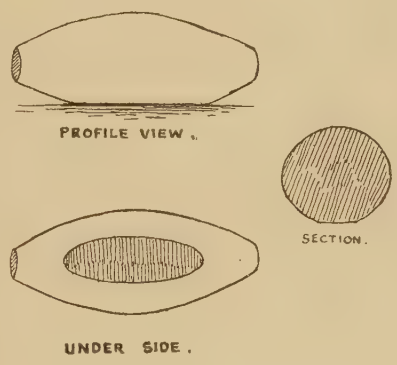


FIG. 5.—HAEMATITE WEIGHT.

[1] For the earlier readings of this weight, see *Palestine Exploration Fund Quarterly Statement*, 1894, pp. 220–231 and 284–287. Dr. M. Lidzbarski, whose reading is adopted in the text, has now clearly demonstrated that the hitherto doubtful inscription on one side of the weight is simply a blundered and subsequently erased version of what appears on the other side (*Ephem. für Semitische Epigraphik*, I. pp. 13, 14).

does not seem to belong to any of the above systems, though it almost exactly corresponds with the weight of the Aeginetan silver staters.[1]

§ 5.—THE SOUTHERN WING, AND ITS PAINTED RELIEFS.

To the east of the Southern Terrace basement three shallow steps appear leading up to what in some respects is a continuation of the same system, but which is here described as the Southern Wing of the Palace. This southern wing forms the end on this side of the great Central Court, formerly described as the East Court, and it is natural to suppose that it had some direct means of access from its southern as from its northern side. These steps are in fact in line with two short basement galleries or elongated chambers, with an intervening block, which suggest the further course of an upper passage-way leading to the Court. The Corridor that apparently ran along the Southern Terrace, and which formed, as we have seen, the continuation of the entrance Corridor from the west, would have naturally opened into this passage leading from the Southern Step-way. A direct corroboration of this view is indeed supplied by the fact that above the floor level of the basement space, over which the joint course of these two passages would have run, were found numerous fragments of blue slate slabs like those along the borders of the "Corridor of the Procession."

That there was thus direct communication both from the Western and Southern Entrances with this Central Court can hardly be doubted when the leading part played by this Court in the Palace economy is fully realised. The result of the most recent exploration has been to show conclusively that this great paved area was the real focus of the inner Palace life, just as the West Court represents the meeting point between Palace and City. It will be seen from the succeeding sections that the principal halls of the building lay on the eastern side of this Central Court. It may be further assumed indeed that a prolongation of the continued southern and western entrance ways ran along its south border and gave covered communication with the important *Megara* of the eastern quarter. The chambers actually un-

[1] Their full weight is given as 194 grains by Head (*Hist. Num.* p. 332). The value of the comparison is of course diminished by the great interval of time between the date when the weight was used and the first issue of Aeginetan staters. Another similar haematite weight found in Egypt, weighing 3 grammes (46·3 grains) may, however, be regarded as a fourth of the same unit as that represented by the Knossian example. Three leaden disks were found in the Palace which also appear to be weights. They weigh respectively 8·45 grammes (c. 131 grains), 22·05 grammes (c. 340 grains) and 42·7 grammes (c. 680 grains).

covered in the Southern Wing are merely basements, some of them of rough construction, but the longest of these, running from west to east along the borders of the Court, certainly suggests the former existence of a gallery above.

The architectural importance of the buildings that once overlooked the Central Court on the south side is indicated by decorated remains found in the western basement space on this side. Above the floor level of this room near its east wall, from about a metre below the surface, were uncovered a series of fragments of bas-reliefs in *gesso duro* representing male subjects. Like the bull-reliefs found in 1900, these plaster fragments were coloured. The first important piece brought to light showed the back and ear of a male head wearing a crown, the upper part of which consisted of a row of sloping *fleurs-de-lys* with a taller upright one in the centre. Of the others all had a forward slant except the hindmost, which was sloped in the other direction. The colours of the diadem itself and its offshoots were evidently intended to represent inlaid metal-work. The *fleur-de-lys* ornament recurred in the shape of a collar formed of links of this shape round the neck of a male torso found near the relief of the crown. The ornament itself is typically Mycenaean, and its derivation from the pure lily type with the stamens attached may be traced on the gold-plated inlaid dagger[1] from the Fifth Akropolis Grave.

Of the natural lily as a Mycenaean hair ornament we have an example in the coiffure of the Goddess and her attendant handmaidens on the great signet from Mycenae, who wear this flower in the front of their hair. A natural wreath of this kind no doubt served as the prototype of the crown before us. But was the personage who wears it in this case royal or divine? The processional frescoes, with their apparently tribute-bearing youths, and the analogy that they present to contemporary Egyptian monuments in which the representatives of various races bear tribute to Thothmes III., suggest that in these reliefs, which may well be a more elaborate continuation of the same class of subject as those of the Corridor of the Procession, we have also to do with human personages. Among the frescoes in high relief found in a chamber on the eastern slope is an arm holding a pointed cup like that borne by the Cup-bearer of the fresco,[2] a fact which strongly supports this view. These analogies afford a real presumption that in this crowned head we see before us a Mycenaean King.

[1] Perrot et Chipiez, *Histoire de l'Art*, vi. Pl. xix.

[2] See below, p. 89, Fig. 29.

It is probable that a part of a relief of a blue mantle with curving folds, crossed by fine wavy incised lines, which was found near it, belonged to the same figure.

The male torso with the lily collar (Fig. 6) belongs to another figure. It is executed in the same low relief, and in spite of certain conventional peculiarities, such as the narrow waist and over-elongated thumb, shows an extraordinarily advanced style of modelling. The pectoral, deltoid and biceps muscles and others of the fore-arm are very accurately rendered. In addition to other minor fragments the thigh and the greater part of the leg of another figure were also found near the torso. The buttock is but slightly prominent, but great stress is again laid on the muscular development, recalling the Kampos statuette on a larger scale. The reliefs are all life-size, and the skin was originally coloured a reddish brown like that of the men in the frescoes, though this has much faded. In the case of the male torso (Fig. 6) the lilies of the collar seem to have been attached in separate pieces coloured to represent metal work. This applied decoration has, however, become detached leaving the surface below printed, as it were, in its original ruddy hue against the faded surface of the rest of the torso. The attitude and clenched hand may suggest a boxer.

§ 6.—Rooms of the Clay Seals and "Priest Fresco."

Among the basement spaces behind the southern steps already noted was a small room containing a large number of broken impressions of clay seals. As these occurred at various levels it is probable that they were originally derived from a room above this basement. No inscribed tablets were found with these, so that they do not seem to have been used here, as in other cases, for sealing up chests containing such clay documents. The numbers of these seal impressions, on the other hand, and the frequent repetition of certain types seem to show that correspondence on non-perishable material, such as the palm-leaves said to have been used in Crete as writing material, was here both sealed and opened. Nodules of clay were found with the impressions which had evidently been prepared to supply the material for the sealings, and some small bits with partial impressions of intaglios were probably due to the preliminary and tentative use of the signets to test the consistency of the clay. A certain number of impressions belonging to the same deposit, for they repeated several of the same subjects, occurred in two neighbouring chambers to be described as

FIG. 6.—COLOURED BAS-RELIEF IN *Gesso duro* REPRESENTING MALE TORSO WITH *Fleur-de-Lis* COLLAR.

the room of the "Priest Fresco" and "The Lapidary's Workshop." In order to collect these more or less fragmentary seals, prolonged and careful work with the sieves was necessary.

The most frequent types found were animals, bulls or oxen, wild goats, rams or moufflons. A design exhibiting a couchant ox, looking back at a tree, recurred on eleven fairly preserved examples. Some of these seal impressions, as for instance one showing a dog with his head turned back looking upwards and with a collar round his neck, another with fish and polyp, another with a lion leaping on a lioness, and a fragment showing a man looking at the head of a magnificent bull, represent the highest level of Mycenaean glyptic art. To these must be added the half of an impression of an extraordinary large lentoid gem, upon which are seen waterfowl together with wavy lines indicating water, and a naturalistically drawn reed.

FIG. 7*a*.—CLAY SEAL-IMPRESSION WITH MINOTAUR (⅔).

Some very curious examples show a flounced female figure of small dimensions holding what appears to be a string with the other end attached to a swallow, to which another swallow flies. Among religious subjects may be noted a Mycenaean Daemon holding an ewer and an impression, evidently from a gold signet of the usual type, showing a Goddess and votary. Two fragments exhibit what appears to be a man clad in a kind of cuirass, with his body bent towards a monster seated on a cross-legged seat, with the legs of a man, but the head, fore-legs and the upper part of the body, including the tail, of an animal resembling a calf (Fig. 7*a*). This approach to a Minotaur derives additional significance from the fact that several gems have been discovered in Crete—two from the site of Knossos—with the legs of a man and the head and fore-legs of a bull (Fig. 7*b*, *c*). The type of the Minotaur already existed in Mycenaean Crete, where it was one of a series of similar monstrous forms, such as the man-stag, the man-goat, the man-lion, and the eagle-woman.[1]

[1] Gems with these types are known to me from various parts of Crete. Much new light has been thrown on these monstrous forms by Mr. Hogarth's discovery of Mycenaean seal impressions at Zakro (see below).

Besides the actual seal impressions from this deposit there came to light [1] a clay object of a somewhat different class which strongly suggests a more seamy side of the high civilisation here represented. This was a clay matrix formed by making a stamp from the impression of an actual seal, and which could thus be itself used as a signet for making counterfeit impressions of the same kind. The original of this was evidently a large gold signet-ring of a kind resembling, both in its form and the character of its subject, that found in the Akropolis Treasure of Mycenae. That this, like the other, was a royal signet is highly probable, and what adds to the interest of the matrix is that several clay impressions taken from the original ring were subsequently found in association with a very important deposit of inscribed clay tablets in the East-West Corridor on the eastern slope. These various examples allow of the complete reproduction of the design, which displays a Goddess seated in an attitude closely recalling the Goddess on the ring from Mycenae, while a female votary holds out a two-handled cup to her, immediately above which is an orb evidently representing the sun. Behind this female figure is another—half turned away—apparently performing an orgiastic dance. The group is placed on a kind of terrace amidst rock-scenery. It would seem that the clay matrix was actually used for forging the royal signature.

FIG. 7*b* AND 7*c*.—GEMS FROM KNOSSOS SHOWING MINOTAUR ($\frac{3}{1}$).

In the room where this matrix was found, east of that of the seal impressions, were two floor levels. Beneath the uppermost of these, fragments of painted stucco came to light, including a fresco fragment of great

[1] The clay matrix was found in the "Room of the Priest Fresco."

interest. It showed the heads and upper part of the body of two small male figures, each of whom was clad in a kind of white stole, with a broad band running down from the shoulder. In front of them was the upper part of a Mycenaean column, with a very prominent torus to its capital. The column was coloured yellow, perhaps intended to represent gilding.

The stoles of the two figures, very different from the ordinary Mycenaean garb, convey to the modern mind a sacerdotal association. They may be compared with the long robes worn by a certain class of male figures seen on Mycenaean signets, of which several examples have been found in Crete, including an impression of one found in the Palace itself.[1] On the latter, as in some other examples[2]—one from Knossos itself—the figure carries a single edged axe of the Egyptianising and also "Hittite" type found in the Vapheio Tomb.[3] On another Knossian gem[4] he holds a bird, apparently a duck—having possibly a votive significance. On one of the finest of the Vapheio gems he is seen leading a griffin. The associations here seem to be distinctly ceremonial and religious, and on the fresco fragment this element[5] is certainly suggested by the column in front of the figures.

§ 7.—THE LAPIDARY'S WORKSHOP.

In an adjoining basement room to the south of the room of the "Priest Fresco" were a variety of objects showing that it had been used as a workshop or workman's store. These relics also partly extended over the neighbouring basement spaces. Here were found a number of peg-like objects, mostly with a groove round the top, of marble, bone and steatite, jasper and steatite studs, shell beads, low, cylindrical stone objects which had the appearance of draughtsmen, and bone pieces, apparently also connected with a game. Many of the objects were in an unfinished state, and the materials for making others were present in a more or less rough or purely natural state, as, for instance, a flat oblong piece of jasper chipped round at the edges, and crystals resembling beryl.

In the more southerly of these two workrooms was found a small *pithos* filled with small burnt beans. These were at once recognised by the workmen as *κυκιά Μισιριωτικά*—Egyptian beans—a dwarf kind at

[1] Beneath the doorway of the Room of the Stone Drum (described below p. 32).
[2] In the Candia Museum.
[3] Ἐφ. Ἀρχ. 1889, Pl. viii. 1.
[4] In my own collection, acquired in 1894.
[5] Ἐφ. Ἀρχ. 1889, Pl. x. 32.

present imported into Crete from Alexandria, and of which there is an abundant supply in the Candia market. Remains of another pot were also found with carbonised seeds of a smaller kind. The northern part of the other workroom had also been used as a store for grain. It was covered at a depth of 2·60 m. from the surface with large quantities of a carbonised cereal, apparently wheat, extending in a thin stratum. The wheat had probably been heaped on the floor of this room, as there was no trace here of a special recipient.

§ 8.—RESTORED PLAN OF A WESTERN UPPER MEGARON, AND OF THE HALL OF THE JEWEL FRESCO.

That the Southern Propylaeum, standing as it evidently does in direct connexion with the noble entrance Corridor from the west, should have formed the avenue of approach to some important *Megaron*, is on the face of it extremely probable. Unfortunately, last year's excavations showed that the area immediately beyond it had been much denuded, and its relation to the quarter of the building to the north of this remained obscure. From the exposure of a good deal of the primitive clay deposit of the Neolithic settlement in the intervening space, the name of "Central Clay Area" was provisionally applied to this plot in last year's Report.

But subsequent observations have led me to modify this conclusion. On the eastern margin of the area there are visible in position slabs of good paving, which seem to indicate that the whole of the area immediately bordering on the Propylaeum had originally been paved. That the slabs should have been removed over the greater part of the space in question agrees with what is now seen to have occurred on a larger scale in the great Central Court, ready-made paving slabs affording an obvious temptation to later owners of the soil. It has, therefore, been thought better to substitute for the area the name of "Court of the Altar" from what appears to be an altar-base visible in its eastern bay.

Dr. Dörpfeld, on visiting the remains of the Palace, was much impressed with the view that the Southern Propylaeum must have formed the direct avenue of approach to important halls to the north, and suggested that part of the denudation visible in the "Court of the Altar" was due to the removal of a ramp or step-way leading to a first-floor storey beyond. Of the two alternatives the former existence of a broad flight of steps is much

more in accordance with the practice of the "Minoan" architects of Crete, as is now conspicuously shown by the noble flights of the Phaestos Palace. It is also highly probable that the same agencies that were instrumental in removing so many of the paving slabs may account for the disappearance of a flight of stone steps.

It was already pointed out in my former Report that the flight of steps with a central column base running upwards from the Central Court, in juxtaposition with the downward steps of the Throne Room Antechamber, must have led to an upper hall or Megaron. Of the existence of a long upper hall at this point new evidence was, in fact, brought to light by this season's excavations. The further question now arose: Was not this again in connexion with a second upper Megaron to the south of it,—a Megaron in turn communicating with the Court of the Altar and the Southern Propylaeum by means of the broad flight of steps which *ex hypothesi* existed on that side?

Of the existence of an upper storey in this part of the Palace there has never been any doubt. At various points along the upper part of the basement walls were blocks and slabs belonging to the lower course of the upper walls or the pavement of its chambers. This year, after a heavy shower of rain, I noticed a flat block in this position with the impress, clearly brought out in black by the moisture, of two round columns side by side, about 45 centimetres in diameter, that had rested on it, the black colour being probably due to the burning of the wood of which the columns were composed.

That a columnar hall had existed on this upper level was made probable by two other circumstances. The two square pillars marked with the double axes would find their most natural structural function in the support of corresponding columns on the upper storey,[1] while a pier halfway

[1] The function of supporting does not necessarily conflict with the view that pillars of the double axes were of a consecrated nature. It coincides in fact with an aspect of the ancient cult treated of in my monograph on *Mycenaean Tree and Pillar Cult*, § 17, "The Pillar of the House." The criticism made by Mr. W. H. D. Rouse (*J.H.S.* xxi. p. 273), that there are other signs besides the double axe, and that therefore undue stress should not be laid on this, is answered by the exceptional position which the double axe holds among the Palace signs, of which the most recent excavations afford fresh corroboration—witness the Megaron of the Double Axes—(see p. 112 below), by the occurrence of the double axe in its votive form as a vase ornament of the "Palace Style" (see p. 53 below), and by the fact that several of the most constantly recurring among these signs, such as the star, the trident, the branch, the cross, and the sistrum (?), are also traditionally associated with various divinities. It is probable that some of these signs grouped together on the hieroglyphic seals represent invocations of a religious kind. The recurrence of the Double

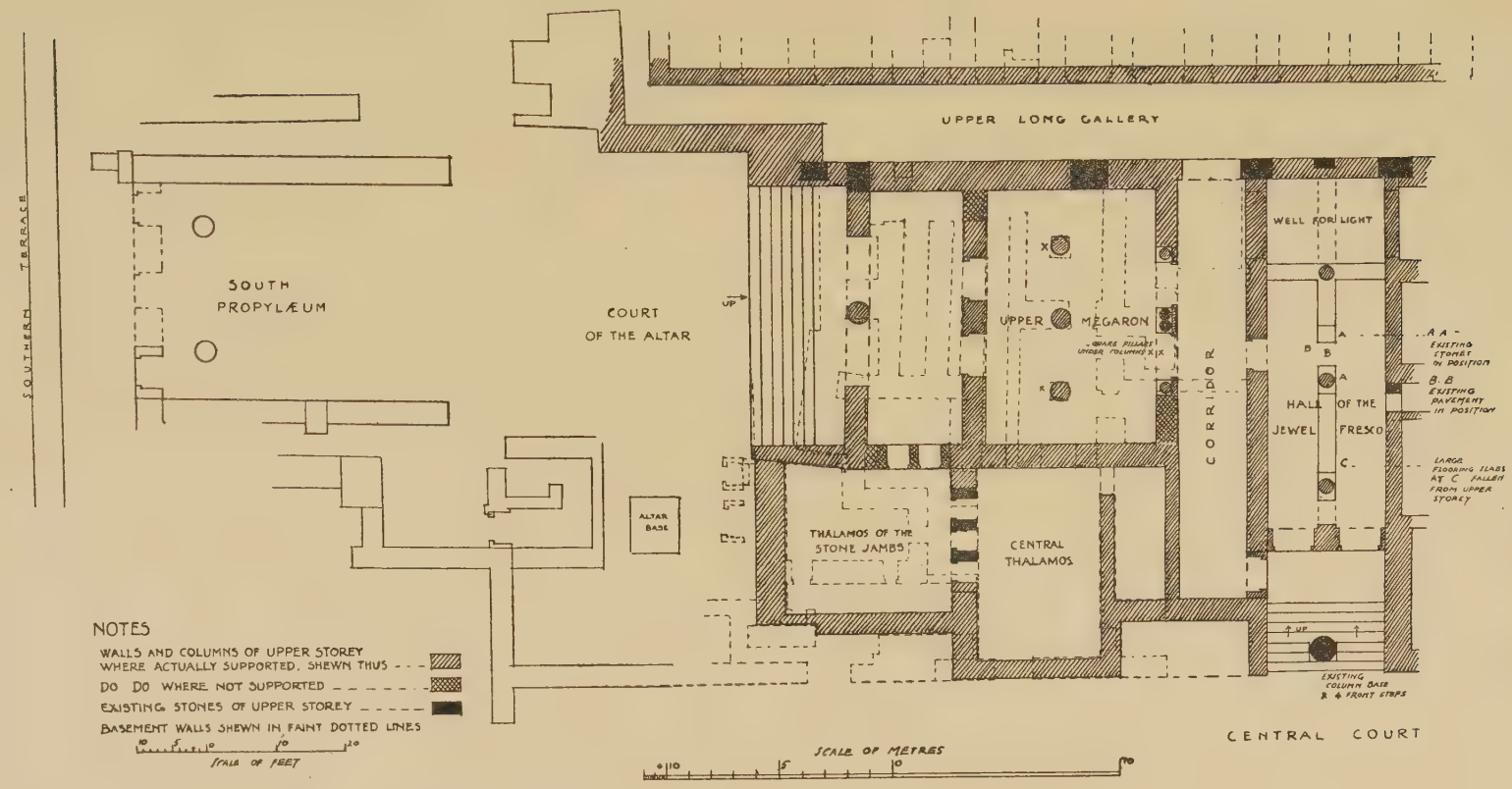

KNOSSOS · PLAN SHEWING RESTORATION OF UPPER MEGARON, ETC
SOUTHERN TERRACE
SOUTH PROPYLÆUM
UPPER LONG GALLERY
COURT OF THE ALTAR
ALTAR BASE
UPPER MEGARON
WELL FOR LIGHT
CORRIDOR
HALL OF THE JEWEL FRESCO
A A - EXISTING STONES IN POSITION
B B EXISTING PAVEMENT IN POSITION
LARGE FLOORING SLABS AT C FALLEN FROM UPPER STOREY
THALAMOS OF THE STONE JAMBS
CENTRAL THALAMOS
EXISTING COLUMN BASE & FRONT STEPS
CENTRAL COURT
NOTES
WALLS AND COLUMNS OF UPPER STOREY WHERE ACTUALLY SUPPORTED. SHEWN THUS
DO DO WHERE NOT SUPPORTED
EXISTING STONES OF UPPER STOREY
BASEMENT WALLS SHEWN IN FAINT DOTTED LINES
SCALE OF FEET
SCALE OF METRES

FIG. 8.—RESTORED PLAN OF WESTERN UPPER MEGARON AND THE HALL OF THE JEWEL FRESCO.

between them seems to have been devised for the support of a third column or pillar above. More than this, two column bases were actually found above the floor level of the adjoining room named from them, which in all probability had once been *in situ* above these neighbouring supports.

Taken in connexion with the lines of the surrounding basement walls, and the blocks of upper walling still visible on them, this triple line of columns gives the key to a very probable restoration of the plan of an upper Megaron opening on the hypothetical steps to the south as shown in Fig. 8. Its front almost centres on the opening of the Propylaeum beyond.

It will be seen that my restored plan does not correspond with that of the type of Megaron with which we are familiar at Tiryns and Mycenae, with its quadruple group of columns clustering round the hearth. But it exactly answers to the "Minoan" halls of Crete as seen in the Palace of Phaestos, and represented at Knossos itself in the halls now excavated on the eastern slope. The method of construction answers to a more southern type, in which the hearth no longer forms the fixed centre of the Megaron, warmth being probably supplied when necessary by some movable brazier like the modern Greek *θερμάστρα*. A central roof-opening, which could also serve as an outlet for smoke, being thus unnecessary, it was found more convenient to have the opening, which was still necessary for light, at the further end of the hall. This broad well for light was probably provided above with a kind of lantern or clear-storey as a partial shelter from rain.

A comparison of the restored plan on Fig. 8 with the great Megaron at Phaestos shows how nearly the outline of the Knossian hall, as suggested by the piers for the columns and the basement wall-lines, corresponds with the other.

A further parallelism with the Phaestian plan is supplied by the fact that along its right-hand wall, entering from the front, are some smaller rooms or *θάλαμοι* in communication with it. These rooms are apparently three in number, namely, a central chamber over the Room of the Column Bases, with a small annexe to the north, and another fair-sized chamber over the Room of the Chariot Tablets. The access to this suite of

Axe and other similar signs at Phaestos does not weigh against this view. The "Houses of the Double Axe" were probably many, and the name of Labyrinth may itself have recurred,—in fact, Gortyna as well as Knossos claimed one. The various cults associated with the Minoan dominion at Knossos would be largely common to the other princely centres throughout the island. I have purposely reserved a fuller discussion of the signs on the Knossian blocks till the evidence is complete.

θάλαμοι from the upper Megaron seems to have been by means of a door opening on the central of these chambers. The remains of the upper floor, with the jambs of a double doorway leading from this central *thalamos* to the room to the north of it, were still preserved *in situ*. Owing to this it has been named on the plan "Thalamos of the Stone Jambs."

The most uncertain detail is the bi-columnar arrangement shown on the slab already described. This slab stands exactly on the middle line of the Megaron, and it seems safest to suppose that there was here a double doorway in its back wall, each of the two columns of its central division answering to another on the other side of the respective doorways. The doorways thus indicated open on what from the basement wall-lines seems to have been a cross-corridor running from the portico of the elongated Hall beyond to another passage forming an upper gallery of the Long Gallery of the Magazines. In this abutment of the back of the Megaron on two galleries running at right angles to one another, we find again a certain correspondence with the arrangement of the great Megaron at Phaestos.

The Corridor on which the upper Megaron of Knossos opened at its inner end was bounded on its northern side by the long Hall already mentioned. The width of this hall is clearly marked by that of the steps at its eastern end leading down to the Central Court, and its northern boundary thus rests on the south wall of the Throne Room and the rooms in connexion with it. Along the centre of the oblong space thus defined, in a line with the column base on the steps, is another basement wall which afforded the necessary support for piers and columns running along the middle of the long upper chamber. More than this, on the top of this wall several blocks and slabs of the upper structure are still preserved *in situ*, which seem to represent the remains of a raised stylobate with a paved passage-way across it. To the borders of this some remains of the original gypsum paving slabs of the body of the hall also clung, clearly showing the original floor-level. In the basement chamber immediately behind the impluvium of the Throne Room, some fine black slabs were also found in a half fallen position. This is the finest paving that has come to light anywhere in the Palace.

The inner line of the portico, which must have had a double opening, is indicated by a cross line of basement wall, and the western termination of the stylobate by another. At this point no doubt began a light opening of

the kind already referred to in the case of the upper Megaron. Analogy and the elongated shape of the covered part of the chamber make it reasonable to assume that the stylobate supported three wooden columns. It is to be observed that the paved opening noticed in this as probably a passage-way centres with the eastern of the two back entrances of the upper Megaron and a line of doors and openings beyond. This circumstance makes it probable that the doorway by which this hall communicated with the Corridor running along its southern border would have opened opposite this, and thus have centred with the Megaron door in the opposite wall of the Corridor.

Of the brilliant and beautiful decorative designs that once adorned the walls of this upper hall some traces came to light in the shape of numerous painted stucco fragments found above the floor level of a basement magazine situated beneath its central part, to be described below as the Magazine of the Vase Tablets. Among the fresco designs painted on the flat were pieces apparently belonging to a border, including a not infrequent wave and wavelet pattern, and a very beautiful design of an olive or myrtle spray with dark brown and reddish foliage. Another fragment is still more remarkable. It represents the thumb and forefingers of a man, beautifully modelled in high relief, and of the conventional reddish colour with a white nail, holding the corner of a blue robe and the end of a beaded chain, which from its yellow hue is evidently intended to be of gold. Unlike the fingers, these are painted on a flat surface. The jewels consist of round beads with pendants in the shape of little negroes' heads, of the same yellow hue but with curly hair outlined in black, and with large rings linked in each other and coloured red hanging from their ears. The gold ornament appears to be attached to the corner of the blue robe. A dark object in connexion with it may possibly represent a lock of human hair, and the coloured fragment seems to be part of a life-sized relief of a man fastening a robe by means of the gold agrafe about the shoulders of a personage of distinction. The hand and jewels present a striking analogy to a fresco fragment found near the north portico, showing the very graceful fingers of a woman holding the end of a necklace of dark, round beads. In the present case the golden material of the necklace, coupled with the negroes' heads, seems to point to Nubia—the Egyptian "Eldorado"—as the source of the precious metal.

This interesting fragment suggests that the walls of the long Hall

from which it was undoubtedly derived, and to which the name of the Hall of the Jewel Fresco may be conveniently given, was once adorned with a series of figures like those of the western Corridor, but in this case, as in the South Gallery described above, executed in fine relief.

§ 9.—SUPPLEMENTARY OBSERVATIONS IN THE REGION ABOUT THE ROOMS OF THE COLUMN BASES AND OF THE PILLARS.

This season's work brought with it certain modifications and additions to the plan of the part of the building of which the "Room of the Column Bases" forms the central point. This Room stands to this part of the Palace in much the same relation as the antechamber of the Throne-Room to the adjoining area. It serves as a kind of forehall to the rooms behind and beside it, and the analogy is strengthened by the fact that here too the access to the Central Court was by means of a short flight of steps, and that on the north wall of the room was a stone bench of the same kind as those flanking the Antechamber of the Throne Room.

The "Room of the Great Pithos," to which that of the "Column Bases" gave access on the north, was found to open on a second well-paved store chamber[1] in the centre of which were two sunken cists, resembling the "Kaselles" of the Magazines but without a second recipient below. The white-faced stucco on the south wall of this room showed stripes of red below and above, forming a kind of dado and cornice band similar to that of the Magazines and Long Corridor. This basement chamber may be called for distinction the "Room of the Two Cists."

On the west side of the "Room of the Column Bases," two interesting developments took place. What had seemed to be a blind alley opening on the south-west corner of the hall proved to be in reality continuous and to supply a thoroughfare to the Long Gallery by the passage called in the preceding Report the Corridor of the House Tablets which is in fact a section of the same gangway. This circumstance refutes the view[2] that communication between this part of the Palace and the Long Gallery was at any time interrupted.

It further turned out that the doorway leading from the Hall of the Column Bases to the East Pillar Room was flanked by a second. The

[1] The floor level here was 2·10 m. below the surface. At 1·30 m. down was a deposit of burnt wood.

[2] Suggested in my previous Report, p. 26.

double entrance adds to the importance of this inner room and certainly enhances the probability that the pillars so significantly marked by the double axe had sacred associations. In this connexion moreover two additional facts are to be noted. On either side of the East Pillar is an oblong receptacle, too shallow to have been a store place like the "Kaselles" but well adapted for offerings or libations. On the other hand the floor round the West Pillar showed a regular border and central square like that of the Throne Room and indicating that in this case as in the other it had been adorned with varied colouring.

§ 10.—Recess off Central Court with Seal-Impressions showing Lion-guarded Goddess and her Shrine.

On the front line of the Central Court between the "Room of the Column Bases" and the steps of the "Hall of the Jewel Fresco" is a curious oblong recess with a side niche having a cement floor at its south end. Its depth is too shallow for it to have been an ordinary room. On the other hand the finely cut limestone blocks by which it is flanked and partly faced, as well as its conspicuous position in the great Court, indicate that there was here an important structure.

The upper surface had been only partly excavated at this point during the campaign of 1900 owing to the need of leaving a passage way for barrows. On removing the superincumbent earth early in the present season, a floor level came to light about 70 centimetres below the surface covered with a deposit of burnt wood. In this layer, by means of careful sifting, was found a series of fragments of seal impressions.[1] At first sight they appeared to represent more than one sphragistic type, but a careful examination revealed the fact that though the fragments belonged to a series of clay sealings, they had all been impressed by the same signet. Although these various impressions existed only in a fragmentary state it was thus possible to complete one by another, and by means of the overlapping pieces to recover the original design in its entirety.

The seal type thus restored in all its details (Fig. 9),[2] presents a

[1] Two or three scattered fragments belonging to the same deposit were also found within a radius of a few feet; one in the chamber immediately to the west, another on the top of a wall on the north side.

[2] The figure is from M. Gilliéron's careful drawing of the overlapping fragment as arranged according to a key sketch of my own.

religious subject of great interest. The design, as is usual with such religious compositions, had evidently been engraved on the besil of a gold signet ring of the same kind as that counterfeited by the clay matrix described above.

The central figure of this design is a female Goddess in the usual Mycenaean garb, standing on her sacred rock or mountain peak, which represents, in fact, her aniconic shape, and upon which her two lion guardians and supporters rest their fore-feet on either side. In her hand she seems to hold out a kind of weapon, and in front of her stands a male votary in the act of adoration. Behind her is her shrine with sacred columns, in

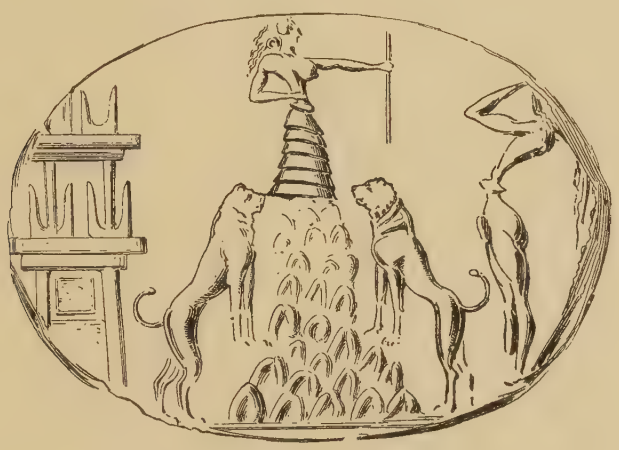


FIG. 9.—IMPRESSION OF SIGNET-RING, SHOWING LION-GUARDED GODDESS AND SHRINE (⅔).

front of which, and again on the entablature above, the "horns of consecration" are clearly visible.

To myself this discovery was of special interest, inasmuch as it completes and amplifies the evidence I had collected of a series of Mycenaean seal-types referring to a Goddess,—the prototype of the later Kybelê and Rhea,—with lion guardians, sometimes standing herself between them, sometimes represented by her aniconic image in the shape of a column or base.[1] A seal impression found in a chamber in the eastern quarter of the Palace shows the simple type of the Goddess between two lions. In the present case we see her,—and it must be

[1] Mycenaean *Tree and Pillar Cult* § 22.

remembered that, in Crete too, there was an "Idaean Mother,"—standing on her sacred peak. The "horns of consecration," on the other hand, placed before the columns on the shrine behind her and again on its entablature show that the columns here represent the artificial pillar forms of the cult object as opposed to the holy mountain itself on which the Goddess stands.

We have here, in fact, examples of both the handmade and the natural objects of the divine possession. Either the pillar or the sacred peak itself could be equally worshipped.

The shrine itself has a special importance from the parallel it presents to that shown on the small fresco found in the Palace in 1900. In this case, indeed, we have naturally to take into account that artistic "short-hand" which characterises the gem engraver's craft. The shrine here is reduced to an entablature with columnar supports, and the lateral wings are omitted. But the basement storey below and the twin columns with the sacral horns in front of them are features of correspondence which show that we have to do with essentially the same type. It is probable that if the roof of the shrine on the fresco had been completed we should have seen additional "horns of consecration" resting upon it as in the case of the shrine on the signet. This feature, in fact, recurs on the wall-top of a fragmentary fresco apparently depicting another sanctuary.

These correspondences, and the further proofs of the cult of a similar Goddess supplied by other seal impressions found in the building, establish a real presumption that the shrine on the wall-painting was in part at least dedicated to the cult of the same Mycenaean divinity. It is, indeed, by no means improbable that the deposit of seal impressions relating to this cult in this small chamber at a prominent point of the front of the great Central Court may give a clue to the actual site of the miniature temple depicted on the fresco. It is clear indeed from the basement blocks visible below it, and the crowds in the open space in front of it, that the original of that shrine was reared on the side of a Court.

In this connexion it is interesting to recall that the tradition of a very old cult of Rhea survived at Knossos to quite late times. Diodoros records that in his day, there were still visible on Knossian soil (once, as he tells us, inhabited by Titans), the site and foundations of the House of Rhea and a very ancient Cypress Grove.[1]

[1] Diod. Sic. lib. v. c. 66.

§ 11.—SUITE OF SMALL ROOMS BELONGING TO THE WOMEN'S QUARTER.

Owing to the necessity of keeping open passage-ways above, a zone immediately to the north and west of the Room of the Throne and its annexes had been left almost completely undisturbed during the first season's work. The excavation of this area has now brought to light a series of small rooms in communication with one another and presenting certain common features.

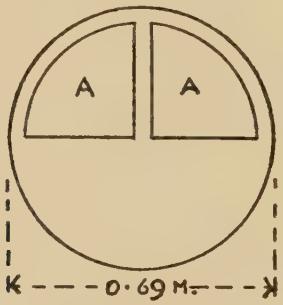
The first of this suite of small chambers is the room already opened in 1900, approached by a doorway leading from the Corridor of the Stone Basin and to which the name of "Room of the Cupboard" was given from what appeared to be a small closet in its western wall. This cupboard, however, turned out on closer examination to be a blocked doorway leading to the rooms beyond. It will be remembered that the limestone slab of a seat was found on the floor of this room, hollowed out to the form of the body, like the throne, but which from its ampler dimensions I had already been inclined to regard as a woman's seat.[1] This conclusion has, as will be seen, found a striking corroboration from the discovery in another compartment of the same suite of rooms of a seat of similar proportions fixed on the floor, and therefore belonging to a person of the female sex, the Mycenaean women, as distinguished from the men, being often depicted in a more or less squatting attitude.[2] It may be useful, therefore, as the name of "the Cupboard" no longer applies, to distinguish this small chamber as the "Room of the Lady's Seat."

The charred woodwork of the blocked doorway between this and the room immediately to the west was well preserved and had contributed to give its shallow recess the aspect of a cupboard. Under the rubble partition with which it was blocked were found some fragmentary remains of linear tablets which showed that the blocking had taken place at some period after the time when these clay documents had come into use. The small room thus entered had along its northern wall a low stone bench

[1] *B. S. Annual*, 1900, pp. 38, 42.

[2] Compare, for instance, many of the miniature frescoes of the Palace, and the representations of Goddesses on the signets. The Minotaur-like monster, on the other hand, seen on the seal impression already described, is seated on a kind of throne. The "Chariot tablets" of Knossos often show a high seat in the car, recalling the throne in outline.

On the threshold of the doorway leading from this "Room of the Stone Bench" to that adjoining it to the west was found the clay impression with the axe-holding, priest-like figure described above.[1] This room presented a most enigmatic feature. About 1·50 metres from its west wall and 1 metre from that to the south stood the drum of a column ·69 centimetres in height and the same in diameter. It rested, without a base, on the cement floor and its summit was at a depth of a metre from the surface. The eastern half of its flat top surface was cut out into two shallow quadrants, as seen in Fig. 10, the base of these running almost exactly towards the magnetic north. Against the west wall of the room near the



STONE DRUM
HEIGHT FROM FLOOR · 0·69 METRES.
FLAT TOP · QUADRANTS A·A· SLIGHTLY SUNK

FIG. 10.

column drum was a thin gypsum slab of semicircular form, standing about the same height as the top of the pillar with its base cemented into the wall plaster.

It is evident that the purpose of the column drum and the semicircular slab was in some way connected. They must both have been made use of by a person in a standing position. The two quadrants of the column drum and the exact correspondence between its height and diameter, might well suggest some kind of instrument. It must, however, be borne in mind that the quarter in which this curious object made its appearance was certainly one set apart for women. The analogy of another room of this series to be described below, containing a table and sideboard of culinary

[1] See p. 20.

aspect certainly suggests that here too the object in view was of a domestic kind.

The "Room of the Stone Drum" opens on its western side upon an elongated chamber or small gallery divided into three compartments by projecting buttresses. These buttresses end in good limestone pillars, the upper stone of the second of which is cut down from a larger block, bearing the window sign characteristic of the first period of the building.

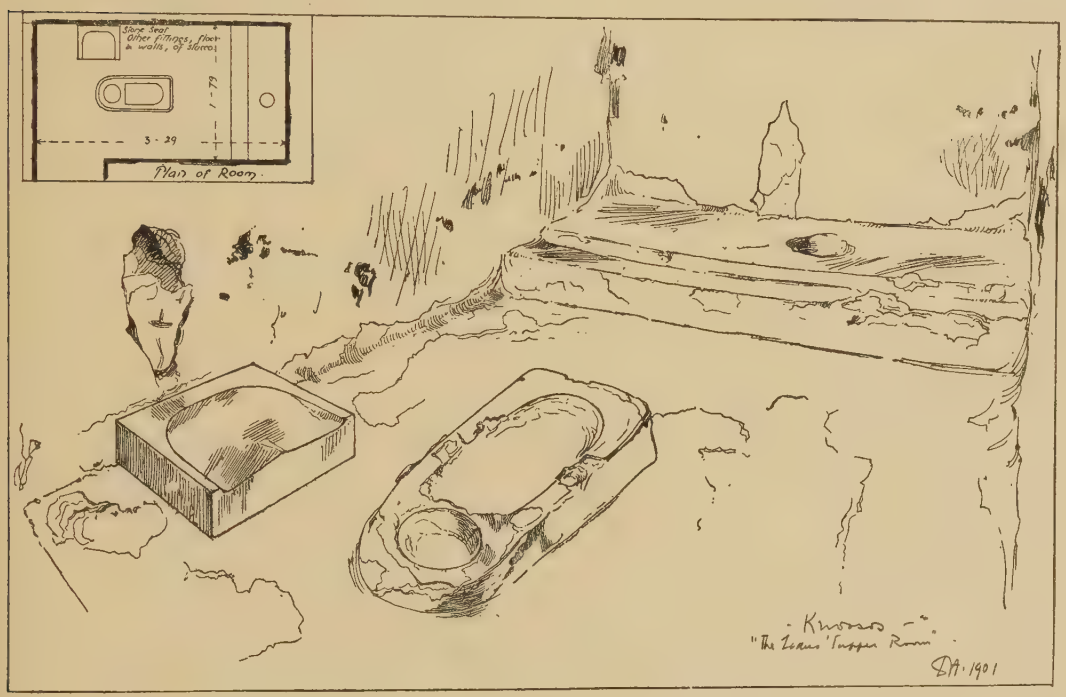


FIG. 11.—VIEW OF ROOM SHOWING PLASTER TABLE AND DAIS AND WOMAN'S SEAT.

This tripartite chamber leads to another small room of considerable interest, which forms the termination of the suite with which we are dealing. Against the wall of this chamber, opposite the door (as if for better light), is another low limestone seat of the same form and approximate dimensions as the woman's seat, noted above in the first room of the series. In this case, however, it is a fixture firmly cemented into the white plaster that forms the flooring of the room. This seat is raised only ·13 centi-

metres above the floor, its width is ·55 centimetres and its depth ·46. These figures become very significant when set beside those of the throne, the seat of which is 58 centimetres high, 45 wide and 32 deep. As already observed, the difference in capacity is naturally accounted for by that of the physical development of the two sexes, while the discrepancy in height is owing to the methods of sitting in vogue respectively among the Mycenaean men and women.

In front and on a level with the seat was a low table rounded at one end and square at the other, the surface of which was formed of a thick coating of plaster (Fig. 11). Like the seat, its table was embedded in the cement of the flooring. At the end nearest the seat was a bowl-like hollow, the other part being occupied by a shallow elongated depression rounded at one end. There can be no doubt that this low table was designed for some kind of manual work performed by the female occupant of the stone seat. The fact that the surface of the table was formed of plaster excludes the possibility that any kind of grinding or pounding was performed here. The material employed must have been plastic or partly liquid, and it is natural to suppose that the receptacles were used for some preparation of a culinary nature.

Along the inner wall of the room ran a kind of dais rising in a double step, the surface of which was covered with the same fine hard white plaster as the table. It is possible that the lower step served as a kind of bench like that along the wall of the second room of the present suite, while the upper may have been used as a shelf or side-board. The centre of this shelf was hollowed into a bowl-like receptacle like that of the table. Remains of the same fine white plaster covered the walls of this small chamber. The room itself, to which the name of the "Room of the Plaster Table" may be given, seems to have served as a kind of small kitchen.

The distinctive seats found in the first and the last of this continuous suite of small rooms, put it beyond reasonable doubt that we have here to do with a section of the Women's Quarter of the Palace. These rooms are entirely separated from those of the Throne Room system proper, or the Megaron of the Jewel Fresco which overlooked it. They form one long "apartment," the single entrance to which is supplied by the door opening on to the "Room of the Lady's Seat" from the "Corridor of the Stone Basin." But this passage communicates on the other side with the group

of chambers, some of them now ill-defined, to one of which belongs the miniature fresco with its remarkable illustrations of Mycenaean Court ladies. It is possible that the Women's Quarter extended on this northern side of the Corridor and included an important Megaron.

A natural question arises as to the lighting of the suite of women's rooms above described. The evidence of various avocations performed in these rooms certainly tends to show that their occupants were not left in darkness. Light may have been obtained for the first two rooms of the suite either by means of a kind of clear-storey above the level of the roof of the Throne Room, which does not seem to have had any other chamber above it, or from the Corridor of the Stone Basin, which may have been partly open. But the question of the lighting of the other chambers of the series involves greater difficulties, since the adjoining rooms at the back of the Throne Room seem to have had an upper storey. It is possible that the passage way of the tripartite chamber between the Room of the Stone Drum and that of the Plaster Table was left open.

§ 12.—THE WALLED PITS: SUGGESTED PALACE DUNGEONS.

The mud-built North Wall of "the Room of the Stirrup-Vases" ("Bügelkannen") excavated last year having collapsed, a good opportunity offered of exploring the layers underneath. A few centimetres below the floor level with which this wall was connected another Mycenaean pavement came to light and some inscribed tablets resting upon it. This proof that the Room of the "Stirrup-Vases" belongs to a late Mycenaean period is interesting in connexion with the painted vases found in position in it. The "Stirrup-Vases" themselves with their rather coarse octopus designs belong to the same somewhat decadent ceramic class as the vases found in the chambers and galleries of the South Terrace basement. They are far inferior to the products of the fine "Palace Style."

Immediately below this second floor level and about 50 centimetres below that of the Room of the "Stirrup-Vases" two parallel lines of wall with an interval of 1·60 metres between them made their appearance, which continued east under the neighbouring Room of the Flower Gatherer,[1]

[1] The floor of this room was also found in a partly destroyed condition. Here too are two floor levels; (1) a good white cement floor 1 metre below the surface, (2) another cement floor 40 centimetres below the first with a large slab embedded in it.

where they were connected by a cross-wall running north and south. There thus revealed itself a narrow elongated chamber extending 7 metres from the line of the west wall of the "Stirrup-Vase" Room. The walls of this chamber were of small, rather roughly faced limestone blocks much resembling those of the foundations along the West and North Wall, but descending 7 metres—(24⅓ feet)—a far greater depth than any foundations here discovered. The virgin soil here at last reached consisted of the red potter's earth elsewhere found at about the same depth beneath the Neolithic clay deposit. Several pieces of Neolithic pottery were found in this deep chamber, but they must have reached their position through some later filling in. The walls themselves belong to the same Early Palace period as the foundations already referred to and at various levels in the pit, but especially at the bottom, were found fragments of fine stucco, its surface painted a warm terracotta colour and backed with a clayey straw-bound plaster.

Immediately east of the long pit on the further side of the Room of the Flower Gatherer was found another of similar depth and construction, but of much smaller dimensions, 4·25 metres in length by about 1·20 metres in breadth.

With what object were these walled pits constructed? Going down nearly twenty-five feet through the solid clay, they were not mere foundations; neither were they cisterns. As store places for corn they do not seem to be well adapted. In finding a motive for such structures we have in the first place to remember the character of the building in which they were contained. The rubble walls of the Palace made them bad for custody. Where precious objects would have been placed in the secure cells of later buildings, we find them, as is seen by the "Kaselles," deposited in receptacles stowed far away beneath the pavement of the Magazines. The walled pits, indeed, belong to a different category from these stone chests, but it seems conceivable that they were also destined for custody of another kind. In the royal residence some place was necessary for the safe-keeping of captives and hostages, and such by the conditions of the structure could not be found above ground. It does not seem unreasonable to recognise in these deep-sunk walled chambers the dungeons of the Palace—the longer chamber holding several prisoners, the smaller perhaps for solitary confinement. In these deep pits with their slippery cemented sides above, the captives would be as secure as those "beneath the leads" of Venice. The

groans of these Minoan dungeons may well have found an echo in the tale of Theseus.

§ 13.—CONTINUED EXPLORATION OF THE WEST MAGAZINES.

During the preceding season's work eight Magazines had been opened on the west side of the Long Gallery; the rest of this series, ten in number, making a total of eighteen, were excavated during the present campaign.

Already in last year's Report attention was called to the numerous traces of an upper storey visible above the top of the walls and door-jambs of these Magazines.[1] In this respect Nos. 9 and 10 are of special interest as exhibiting well-preserved remains of the actual flooring above the Magazines. A section near the mouth of the Ninth Magazine showed, about 30 centimetres from the surface of the ground, a burnt clay band with the core of a cylindrical crossbeam impressed in it. This former roof-line started at the sides from a height of about 1·90 metres, but sagged down slightly towards the centre. Above it was a brownish layer, and above that again traces of a white pavement of gypsum cement, which in its better preserved fragments showed small pebbles embedded into its fine upper surface. About 15 centimetres again above this was visible in places a red layer of clay plaster representing a second and later floor-level.

A section across the mouth of the Tenth Magazine showed—at the same height as that of No. 9—a clay layer burnt like the other to brick-like consistency from contact with the original roof-beams. Embedded in this burnt clay were visible, as in other similar positions, sherds of rough pottery. About 20 centimetres above the lower level of this burnt clay layer, and apparently forming one whole with it, was a pavement of clay cement with pebbles stuck in its upper surface. This part was carefully excavated from above, the result being to uncover patches of the same pavement *in situ* at a height of 2·5 metres from the floor-level of the Magazine below.

Above the stone jamb that separates the Eighth and Ninth Magazines, at a height of 1·40 metres from the floor-level, is the usual lacuna backed by gypsum cement and originally partly filled by the wooden

[1] *B. S. Annual*, 1900, p. 20.

beams which formed the lintels of the low doorways of the Magazines. This cement layer is 45 centimetres in thickness, and above it again as in other cases, is a large limestone block forming the base of the upper storey wall. This block has the eight-rayed star sign engraved upon it, which also regularly recurs on the lower jambs of the Magazines from the Sixth onwards.

We have here an important piece of evidence that the original structure of the upper storey in this part belongs to the same early date as the lower, though the existence of more than one pavement on the upper floor-level implies subsequent internal changes.

This structural stratification leads to another interesting conclusion. In these and the neighbouring Magazines, at various levels, were found fragments of Mycenaean painted vases, and similar fragments, many of them actually belonging to the same vessels as the others, were also found just outside the adjoining Western Wall of the building, above the level of the Court. It follows that all these remains of vases, whether found inside or outside the Western Wall, must have been derived from the upper chambers which we know to have here existed above the Magazines. The pieces found inside the Magazines, many of them far above the lower floor-level, had worked down to their present position owing to the breaking in of the upper floor.

To these remarkable ceramic relics there will be occasion to return.[1] They are typical examples of what I have elsewhere described as the "Palace Style" and belong to the most brilliant period of Mycenaean Art. They also show the style that was in vogue when this part of the Palace was destroyed.

These fragments may be safely regarded as having been derived from vases existing on the latest of the upper floor-levels, at the moment of the destruction. It follows that the earlier of the upper floor-levels, as seen in the Ninth Magazine, belongs to a period anterior to the great days of Mycenae. This conclusion altogether corresponds with the indication supplied by the limestone block exhibiting the stellar sign, which, as already pointed out, belongs to the earliest elements of the existing building as illustrated by the stone jambs of the Magazines below. It will be seen from the contents of some of the Kaselles and from other evidence that this early architectural element corresponded with a ceramic

[1] See below p. 47, and cf. *B. S. Annual*, 1900, p. 25.

style of a transitional character forming an off-shoot of the Kamáres class, and to which the name of "Mycenaean" is certainly not appropriate.

In order to preserve the valuable stratigraphical evidence supplied by the Ninth Magazine, a section of earth was left unexcavated near its entrance, forming a strip about 3 metres in extent. At the entrance itself in front of this section, six well-preserved *pithoi* were brought into view, one of them overturned. Behind the unexcavated block of earth, in the back part of the Magazine, stood fifteen more pithoi, twelve of them whole. This Magazine, like the Seventh, was divided into two parts by a projecting buttress 2·14 metres broad and 2 metres high. It consisted of well-squared gypsum blocks and stood out a metre from the south wall, leaving a gangway between the two halves of the Magazine of about 1·25 metres. A small deposit of clay tablets was found above the floor-level at the west end of this Magazine,[1] interesting as exhibiting a pictorial sign apparently representing a granary. A chalcedony lentoid gem was also found here, showing a man grappling with a bull, on the back of which springs a dog with bristling mane.

The Tenth Magazine was comparatively narrow. At the entrance it was 1·85 metres wide but, 2·30 metres in, the north wall thickened, reducing the width to 1·60 metres. The pithoi here had been a good deal broken and the "Kaselles" disturbed, probably by later treasure-seekers. Near the mouth of the Magazine, however, stood an exceptionally fine store-jar of somewhat elegant contour, with a slender base. In its system of decoration it somewhat recalled the large pithos from the room adjoining that of the Column Bases. At intervals between the base and summit it had three tiers of perforated handles, separated by triple horizontal bands.

The next three Magazines (Nos. 11, 12 and 13) are especially long—nearly 19 metres, or 5 metres more than the preceding series—the architect having availed himself of the additional space gained by the great angle of the Western Wall of the building. On the other hand they are narrow, their average width not exceeding about 1·60 metres.

The Eleventh Magazine[2] proved to be very rich in pithoi which, to the number of twenty-two—seventeen more or less perfectly preserved,—were arranged along its Northern Wall. The place of the "Kaselles" had

[1] One of them had fallen into the second pithos from that end.

[2] The south wall of this Magazine was badly preserved, the painted stucco being visible only at its east end. At 2 metres from the entrance the south wall thickens, and the Magazine narrows to a width of about 1·40 metres.

been modified in consequence of this and instead of being as before in the middle of the gallery they were here ranged nearer the south wall. Placed thus they were accessible without disturbing the store-jars. It will be seen that this is a very different arrangement from that of Magazine No. 8, where it was only after removing the huge store-jars that the chests below the pavement could be opened. At the west end of the Eleventh Magazine, owing to the falling away of the ground the tops of the pithoi were only a few centimetres beneath the surface of the earth, or actually showed above it, but they were nevertheless for the most part intact.

A small deposit of inscribed tablets, most of them in a somewhat fragmentary condition, was found in the Eleventh Magazine from about ·80 centimetres to a metre from the surface of the ground near the sixth pithos from its entrance, into which some of the pieces had fallen. Near these were the charred remains of a wooden box and, in a vertical position near the south wall, a gypsum slab, perhaps belonging to a cist of that material, in which the box had been enclosed. Here were also found two seal impressions from large lentoid gems showing two variations of the type of a bull seized by lions, and a smaller sealing with a Cretan ibex in a contorted posture. From the height—about a metre—at which this deposit occurred above the floor-level and from the discovery in the adjoining Twelfth Magazine[1] of one or two isolated tablets which from their character seem to belong to the same series, it is probable that the chest containing the tablets had originally rested on the floor above. The half of an interesting seal impression exhibiting a facing head found over the wall of the Tenth Magazine had also probably helped to secure the same batch of clay documents.

The Twelfth Magazine contained twenty store-jars of which twelve were intact. They were ranged along the north wall, except one which blocked the gangway about the middle of the Magazine. The "Kaselles" were as in the last case set near the southern wall. They had been carefully lined with cement, perhaps to enable them to contain liquids.

The doorway of the Thirteenth Magazine had been narrowed by means of gypsum slabs set on end one over the other. The pithoi, of which thirteen were distinguishable along the North Wall, had with the exception of four been reduced to a very fragmentary condition. There

[1] The tablets, two perfect, one in two pieces, lay about 80 centimetres west of its entrance and 1·40 to 1·70 metres below the surface of the ground.

was here a long row of nine Kaselles—two at the west end out of line with the others and nearer the south wall. In this Magazine was found a glazed terracotta roundel with volute quatrefoil. About 5 metres from the entrance and a metre below the surface there also came to light a few pictographic seals—apparently forming part of a small deposit independent of those found at the back of the staircase of the Long Gallery.

The succeeding Magazines, from the Fourteenth to the Seventeenth inclusive, form a group by themselves distinguished from the others by the fact that they communicate with the Long Gallery by a single entrance. This single entrance, which leads first to the Seventeenth Magazine, abuts on the narrow passage which forms the continuation of the Long Gallery beyond the point where it is partly blocked by the stone staircase. This comparative isolation, moreover, was in the latest days of the Palace made complete by a small cross-wall of rubble masonry which blocked the narrower continuation of the Long Gallery just before the entrance to the Seventeenth Magazine. That this cross-wall was a later construction is shown by the uninterrupted continuance of the pavement slabs beneath it which mark the prolonged course of the Long Gallery.

The existence of a revea on the further side of the north entrance pillar of the Thirteenth Magazine makes it probable that the Fourteenth was also originally planned to have a direct entrance from the Long Gallery. According to the existing arrangement, however, it was necessary to enter by the Seventeenth Magazine, to pass thence by a door opening to the left into the Sixteenth, to skirt round the Fifteenth Magazine and thus eventually to reach the Thirteenth Magazine by a door at its back.

The floor of the Fourteenth Magazine was of rough paving, perhaps originally covered with cement. No pithoi seem to have been stored here, and the objects that came to light in this chamber were doubtless derived from an important structure of the upper storey. Chief among these were several fragments of a fine limestone frieze with reliefs and other architectural fragments to be described below. There were also found considerable remains of burnt wooden beams[1] which probably belonged to the same superstructure. Some fragmentary tablets found here were merely stray pieces from an important deposit found in Magazine No. 15.

The Fifteenth Magazine, shorter than the last, was also entered from

[1] These charred remains lay at depths varying from 1·20 metres below the surface at the east end of the Magazine to 1 metre at the west.

the Sixteenth by a door near its west end, the carbonised remains of its wooden door-posts being well preserved. The floor here consisted of isolated and irregular paving stones which had acted as a support for a cement pavement. Like the other Magazines of this group it was devoid of store-jars.

Near the west end of this chamber was found a remarkable relic cut out of the porphyry-like limestone much used here for sculptured objects

FIG. 12.—STONE WEIGHT: Height 42 cm. (17 in.).

(Fig. 12). It was evidently a large weight and had a boring near its apex for suspension. Upon both its sub-triangular faces it showed an octopus in relief, and their tentacles were also coiled over its square-cut sides. A smaller perforated object of gypsum, presenting the same general outline but without any ornament, was found in Magazine 13,[1] but from the carelessness of its fabric this may have simply belonged to the class of loom-weights.

[1] In too decayed a condition to afford a sufficient index of its original weight.

The present carefully finished and elaborately decorated example, which is 42 centimetres in height[1] and weighs 29 kilograms[2] has every appearance of having been a standard weight. The device of the octopus for the ornamental reliefs may well have been dictated by the desire to secure a design which would cover the whole surface and thus protect the weight from fraudulent chipping or grinding away. In this way it would have answered the same purpose as the official stamp of a coin or the milling of its edges. It is to be observed that the weight shows a close approximation to the Babylonian mina system. Weights of 30 light minas or half talents are known, scaling approximately 15,000 grammes.[3] The corresponding heavy 30 mina weight would be 30,000 grammes—a talent according to the alternative calculation. It will be seen that the Knossian weight of 29,000 grammes represents a very slight reduction on this Babylonian standard. The influence of foreign weights—so far at least as form is concerned—has been already illustrated among the Palace finds by the small haematite weight of a type common to Palestine and Egypt.[4] In the present case, indeed, the form has nothing in common with the duck or lion weights of Babylonia, though the standard seems to correspond with the light talent or with half the heavy talent.

The Fifteenth Magazine was also noteworthy for a very important deposit of inscribed clay tablets of the linear class. These were found from about ·50 centimetres beneath the surface a little to the left of the entrance. Parts of many were wanting owing to the mass of the deposit lying too near the surface earth, but it nevertheless contained some of the longest inscriptions yet discovered. Among these is one of fourteen lines in which the woman-sign is constantly repeated. Like others of this series on which this sign occurs it possibly refers to female slaves. With this hoard of tablets was found a seal impression showing a bull attacked by two dogs countermarked and countersigned in the linear script, another exceptionally large impression with two bulls and another with part of the "Lions' Gate" scheme. It is possible that this deposit had been originally placed in a room of the upper storey and had fallen through into the Magazine.

In this Magazine and the adjoining space at its back between its end

[1] It is 27 centimetres wide and 13 thick at bottom and 8 centimetres wide at top. The boring is 5–6 centimetres in diameter.

[2] As nearly as could be determined by local weights and measures.

[3] Brandis, *Münz. Mass. u. Gewichtswesen, etc.*: Head, *Historia Numorum*, pp. xxx. xxxi.

[4] See above.

wall and the West Wall of the building were found further parts of the stone frieze and other architectural fragments. This back space, which affords passage to the entrance of the Fourteenth Magazine, is itself a continuation of the Sixteenth. Except for a stone cist against the South Wall the Sixteenth Magazine offered little of interest, and the Seventeenth was only remarkable from the fact that a line of "Kaselles" that had formerly extended along its floor had been entirely dug up at some time by treasure-hunters leaving a long square trough.

The relation of the Eighteenth Magazine to the adjoining group is not clear, as there is no visible entrance to it. In this Magazine was found a three-sided clay seal with linear inscriptions and an obsidian arrow-head of a type resembling those from the Shaft Graves at Mycenae. In this connexion may be mentioned the discovery, by a large rubbish heap on the north-east corner of the site, of a small steatite relief of an archer against a background of conventional rocks (Fig. 13). He is bearded, unlike the other male figures found here, and wears a kind of bathing drawers somewhat different from the typical Mycenaean costume as seen at Knossos but identical with that of the lion-hunters on the dagger-blade from the Fourth Akropolis tomb. His attitude greatly resembles that of the naked bowmen on the silver vase fragment from the same grave, and his bow, like theirs, is of the European and African type. It is probable that this was part of a battle scene.

FIG. 13.—STEATITE RELIEF OF ARCHER.

The ground here sinks so that the walls are greatly denuded towards the extreme north-west angle of the Palace, which makes it difficult to ascertain the exact interior arrangement at this point. It is certain, however, that the chambers here do not form part of the regular system of the western Magazines.

§ 14.—FURTHER EXPLORATION OF THE "KASELLES" BENEATH THE FLOORS OF THE MAGAZINES.

One of the most interesting problems left by the first year's excavation was the purpose of the stone cists beneath the floors of the Magazines to

which the native name of "Kaselles" (Κασέλλαις) has been here applied. It has been already noted that in the Magazines 9–14, opened during the present season, fresh lines of these were exposed. In some cases the upper slabs had been already taken away, and in no instance were they so completely masked by the pavement as in the Eighth Magazine, it being possible to raise the top slab without first removing, as was there necessary,[1] the whole breadth of the pavement. In Magazines 11, 12 and 13, indeed, the Kaselles had been purposely placed in such a position that they could be opened or made use of without displacing the pithoi. From the entire absence of any sign of grain or other solid stores in the store-jars, the contents of which were all carefully examined, it is almost certain that they contained liquid stores. It is possible therefore that the upper receptacles of the cists in front of them were used as small vats into which oil or wine may have been poured from these clay butts. The liquid thus disposed of would then have been much more accessible for transference into smaller vessels, than when it lay within the high walls of the pithoi.

The entire absence of the upper lids of the Kaselles may in some cases be explained by the presumption that they had been always left open for this purpose or provided only with movable wooden lids.

Even in those cases, however, where the upper receptacle was found uncovered, the removal of its bottom slab, which formed at the same time the lid of the lower cist, was a work of great difficulty. Indeed the continued exploration of the "Kaselles" involved so much careful mason's work and so much necessary removal of the structure around and above that it was not found possible during the last season to open more than a few typical examples.

Fresh Kaselles were opened in Magazines 4, 5 and 6. In the Fifth Magazine the Kasella No. 5 from the west end of the chamber, the upper receptacle of which was found open, was further investigated. The floor of this upper receptacle was formed by a closely compacted and cemented slab which could only be lifted after its side walls had been partially removed. The lower cist was then found to be filled with earth and rubble of the character of builders' sweepings, amongst which, however, was found a largish piece of crumpled gold foil.

In Magazine 6, another cist, the fifth from the west end, and, like the former, open above, was also further explored. It was of the same con-

[1] *B. S. Annual*, 1900, p. 24.

struction as the other, the floor of the upper receptacle being solidly fixed and cemented into the surrounding masonry. On its removal the lower cist was found full of earth and fragments of a pithos, but here too a piece of gold foil came to light. In the lower cist of the first Kasella of the Seventh Magazine a piece of gold foil was also found amidst the earth and rubble.

These repeated discoveries of gold foil in the carefully closed lower cists, is a phenomenon of great significance. The gold foil would hardly have been found in such a position unless it had been the leavings of much more important treasure in precious metals. In other words we have here direct corroboration of the view already expressed in my last year's Report that these almost inaccessible lower repositories, the concealment of which must have been absolute when the upper cist was filled with oil or other liquid stores, were devised for the reception of treasure. These in fact are the safes of the Minoan Palace. But the bullion had been withdrawn —perhaps in all cases the framework of the Kaselles re-cemented—at a date anterior to the destruction of the building.

Of the considerable treasures in precious metals that originally existed here we have, indeed, other direct evidence. On a series of frescoes—some to be described below—tributaries or attendants are seen carrying vases, the yellow and blue colouring of which is significant of gold and silver. Not to speak of those enumerating ingots, many of the clay documents—for the most part inventories and accounts—relate to vessels the forms of which clearly indicate that they were made of precious metals. In addition to examples found last year a small deposit of tablets referring to metal vases was found during this season's work in a Magazine opening on the east side of the Long Gallery.

The second Kasella from the west end of Magazine 4 afforded some additional evidence of special interest in its chronological bearing. The lower of the two cists, which were of the same construction as those already described,[1] was found to be filled with rubble masonry and plaster probably, like that found in a lesser abundance in the preceding cists, the result of the destructive work due to the former opening of the cist at the time when what treasure it may have contained was for some reason withdrawn.

[1] The slab forming the bottom of the upper receptacle and the lid of the lower was placed at a depth of 40 centimetres below the original upper lid. The narrow bases of the upright side slabs of the upper cist overlapped the edge of the bottom slab which could not, therefore, be removed till they had been taken out. This is the regular arrangement.

Among these débris was a fragment of a block with the double-axe sign cut on it, and the remains of three clay vessels of a late Kamáres type (Fig. 14). Two of these were plain pyriform vessels with oval mouth and two handles, one of which, tinted of a purplish brown colour with faint traces of white horizontal bands, it was possible to put together. Two other fragments belonged to another round-necked jar with spirals and flourishes in white on the same ground colour. These ceramic remains

FIG. 14.—PAINTED POTTERY OF LATE KAMÁRES CLASS FROM "KASELLA."

conclusively show that at the time when this lower receptacle was finally closed, the old Cretan type of painted pottery known from the cave where it was first discovered on the southern steep of Mount Ida, as the Kamáres style—was still in vogue. The discovery of the fragmentary block with the double-axe mark further shows what was already becoming evident from a variety of indications—that the fine gypsum masonry with this and other kindred signs which mark the earliest Palace structure belong at least to the close of this Pre-Mycenaean Period.

The vases in this Kasella correspond in style with the painted jar con-

taining smaller vessels, found beneath the later floor level of the Third Magazine, a fact which confirms the view already expressed in my first Report,[1] that the jar in question was placed there after the construction of the Magazine and upon its original floor-level. A similar find was made during the present season, under the later floor-level of the First Magazine,[2] of a wide-mouthed Kamáres jar, broken at the rim, containing smaller vessels, among them some cups of exquisitely thin fabric.

An interesting feature of the upper receptacles of the Kaselles of the Fourth Magazine, is that their inner walls, together with the bordering slabs of the pavement and parts of the adjoining walls of the Magazine, are much blackened, evidently from the burning of some specially inflammable substance that had been contained in these receptacles. It is reasonable to suppose that this was oil.

§ 15.—THE LONG GALLERY AND THE MAGAZINES ON ITS EASTERN SIDE.

Further investigations in the Long Gallery and the adjoining area brought out several new data. Its tortuous Southern Entrance seems to have been guarded by a triple group of massive structures in a line with the western doors of the building. The access to its entrance passage is through a double gangway separated by a solid block of masonry forming an elongated oblong, and flanked by two other rectangular blocks which seem to form the bases of lateral towers. The whole must originally have formed an imposing Pylon.

The total length of the Long Gallery is about 60 metres or 200 feet. In its later as its earlier course it narrows to about half its diameter. The question arose whether the staircase at its north end and the elongated chamber behind it, where the hoard of Pictographic tablets was discovered, represented parts of the original scheme, or whether possibly the pavement of the Gallery was continued under these, in which case they would evidently be later constructions. A careful examination, however, proved that the original pavement narrowed at this point, and that the edges of the slabs corresponded to the outer boundaries of this structure. There is no reason therefore to suppose that the chamber containing this exceptional deposit of tablets and sealings was a later addition.

[1] *B. S. Annual*, 1900, p. 21. [2] 1·65 metres from its west end.

An interesting indication that this Long Gallery was in the main at least lit by artificial light, was supplied by some limestone objects of which two examples were here found. These are in the form of stepped pyramids with a socket bored in their summit, and the Cretan workmen at once recognised in them "torch-holders." It appears that a similar method of fixing torches is still known in the island, and the explanation seems to be quite satisfactory.

The more recent investigations have done much to illustrate the eastern connexions of the Long Gallery. At the south-east it gave access through a low doorway, of which the carbonized posts and wooden lintel were found almost perfectly preserved, to what must be regarded as a group of slightly recessed store-rooms, consisting of bays divided by piers engraved with a cruciform sign—answering to the cross patée of heraldry.

It has been already noted that the passage to which, from the pictorial designs exhibited by them, the name of the "Gallery of the House-tablets" was provisionally given [1] affords direct access, by means of another passage that opens on to it, to the Room of the Column Bases and through it to the Central Court. The supposed isolation on this side does not exist.

At intervals along the Eastern Wall of the Long Gallery, beyond the point where this passage debouches on it, were visible several stone jambs or the remains of such, answering to those at the entrances of the Magazines on the western side, and with similar signs cut on them. It was clear that these had originally given access to rooms or Magazines on the eastern side of the Gallery. It thus appeared that a doorway led directly from the Long Gallery to a somewhat complicated group of small chambers north of the Pillar Rooms. The access to these from the east Pillar Room is indeed of a very narrow and doubtful kind. Immediately beyond this to the north were the well preserved jambs of another doorway in the East Wall of the Long Gallery leading to a chamber left unexcavated in 1900, but which proved, in fact, to be a long Magazine, like those opposite, divided into two compartments by a short projecting cross-wall or buttress towards its eastern end.

This Magazine has already been referred to as having contained fresco fragments fallen from the long Upper Hall above, including the painted stucco relief of the man's fingers holding the gold jewel. It also contained

[1] From the occurrence in the Ninth Magazine of tablets with pictorial representations of similar structures surmounted by ears of corn, it seems certain that they represent granaries.

a small but interesting hoard of inscribed tablets. This deposit, though somewhat scattered, centred round a small niche or "loculus" about half a metre below the surface near the east end of the chamber. From the abundance of decayed gypsum associated with the tablets in this loculus there seems to have been originally a kind of cist in the wall here. From its comparatively high position the contents of this deposit had shown a tendency to drift, and one or two pieces of tablets unquestionably belonging to the same hoard had made their way over the wall or through the entrance into the Long Gallery and even to the mouth of the Eighth Magazine opposite. Several tablets of this deposit exhibited pictorial representations of two-handled vases of forms characteristic of metal technique—one of them with an elaborate curved handle. It has hence been convenient to call this the "Magazine of the Vase Tablets."

With the deposit of inscriptions were also, as usual, found several clay seal impressions. Three of these, evidently taken from a gold signet ring, exhibited a female figure, presumably a Goddess, addressing a male votary. There were also the whole or part of three seals which had been impressed by a very fine lentoid intaglio of a dog with a collar round his neck,[1] looking back and upwards. Another, somewhat fragmentary, showing a lion springing at the neck of a lioness, is of noble naturalistic work and very finely engraved.

In this chamber was also found part of a bronze knife of a typical Mycenaean form and another curious implement of bronze the outline of which forms a *vesica piscis*. Beneath the later floor level which is here 2·50 metres below the surface were remains of a clay lamp, with a shallow recipient made for two wicks, of the same pedestalled class as the stone lamps found on this site. It belonged to the Kamáres class of pottery with red and white decoration on a dark ground. It appears, therefore, that this type of lamp goes back at Knossos to the pre-Mycenaean period.

A little east of the north end of the Long Gallery, near the staircase, was found a minute but very beautiful gold lion. It was formed of two embossed gold plates, the mane being indicated with filigree work of microscopic fineness. The limbs and body of the lion were modelled in the best Mycenaean style, and the whole is a little masterpiece of the goldsmiths' craft. It supplies an anticipation, in the same line and of unsurpassed delicacy, of the finest Etruscan jewellery.

[1] Other examples of this seal impression were found elsewhere on the site.

§ 16.—MYCENAEAN PAINTED POTTERY OF THE "PALACE STYLE."

It has been already noted that at various levels in the Eighth, Ninth, and Tenth Magazines, as well as in the neighbouring deposit along the outer edge of the West Wall of the building, were found numerous fragments of Mycenaean vases in a peculiarly fine "Palace Style," which had been derived from rooms formerly existing above these Magazines. It was possible to put together a sufficient part of some of these vases to complete the designs in several cases, and thus for the first time to obtain an idea of the magnificent style of vase-painting prevalent at Knossos in the great days of the Palace. Nothing among the hitherto published Mycenaean ceramic types exactly corresponds with these, but Mr. J. H. Marshall, who kindly undertook the reconstruction of the Knossian fragments, has been able to identify a large vase from a recently discovered tomb of Mycenae, and fragments of another from the Vaphio tomb (left undescribed by its discoverer) as belonging to the same fabric, and with good reason regards these and some other isolated specimens found on the mainland of Greece as of Knossian importation.

The view that this in fact represents the indigenous "Palace Style" of Knossos in its highest development is confirmed by the evident parallelism which its motives present to the decorative wall paintings of the building. The rosettes—sometimes combined with spirals—so characteristic of these designs, and certain foliated bands, are in fact taken over from the architectural frescoes and reliefs of the Palace. On the vases as in the wall-paintings occur, moreover, conventional flowers betraying reminiscences of the Egyptian papyrus.

Besides these quasi-architectonic types, characteristic of the most stately jars of the Palace chambers, there were found both here and elsewhere on the site, notably in the Room of the Bull-Hunting Fresco on the east slope, to be described below, numerous specimens of another more purely naturalistic class of vase-painting which has also a strong claim to be regarded as distinctively Cretan. Good specimens of this style were also found by Mr. Hogarth in the neighbouring houses, but the result of the present season's excavations in the Palace has been greatly to add to the material. Here again an indication of local production is afforded by the interesting parallelism exhibited between many of these designs and

the flowers and foliage seen on some of the wall-paintings. The reeds and grasses, almost Japanese in their naturalistic fidelity, the crocuses and iris-like flowers, the sprays of olive and myrtle, that decorate the vases, reappear upon the Palace walls.

Some of these fragments show marine subjects, sea-weeds, rocks of grotesque outline or Triton shells, in this case again presenting analogies with other branches of Palace decoration. The Triton shells find their reproduction in the round in the shape of an alabaster vase and in a glyptic form on seal impressions. The rocks are seen as reliefs on steatite vases and gave the suggestion for the fantastic border of a curious red limestone slab found in a chamber adjoining the Hall of the Colonnades on the eastern slope.

§ 17.—THE DOUBLE-AXE ON THE PALACE POTTERY.

Another design that appears upon a piece of one of the larger jars suggests a dedicatory intention. It is a decorative rendering of a double-axe, with a diagonal transverse band on each of its wings (Fig. 15, *a*). This transverse band and the border with which it is accompanied is not seen on the double-axes actually in use in Mycenaean times, of which so many examples have been found both in Crete and on the mainland of Greece. On the other hand it is a characteristic of some of the small votive double-axes found in the Dictaean Cave,[1] and of certain Cretan gems presenting the "*labrys*" type of which an example was also found in the votive deposit of the same cave sanctuary. There is therefore reason to believe that the diagonal and other markings reproduced in a decorative form on the double-axe of the vase had a special religious association.

The appearance of the double-axe of the Cretan and Carian God on painted vases of the earlier Kamáres class from this site has already been noted. In my recently published monograph on "Mycenaean Tree and Pillar Cult" I had adduced evidence in support of the view that the double-axe can itself be regarded "as the visible impersonation of the divinity,"

[1] In 1895 I obtained here a part of a votive axe of this type (restored in Fig. 15, *c* above), and others were subsequently found by Mr. Hogarth (Fig. 15, *b*). In 1896 I found a somewhat rude steatite gem in the Dictaean Cave showing an axe with the same characteristic markings. I have also come across two other examples of the same type, one, a cornelian from Kavusi (Fig. 15, *d*), the other of the same material from Girapetra. In other cases the "labrys" without the diagonal bands appears as the principal type on Cretan gems.

and that apart from, and in addition to, this pillar form, the God may also have been worshipped in the actual form of the "labrys."[1] I ventured

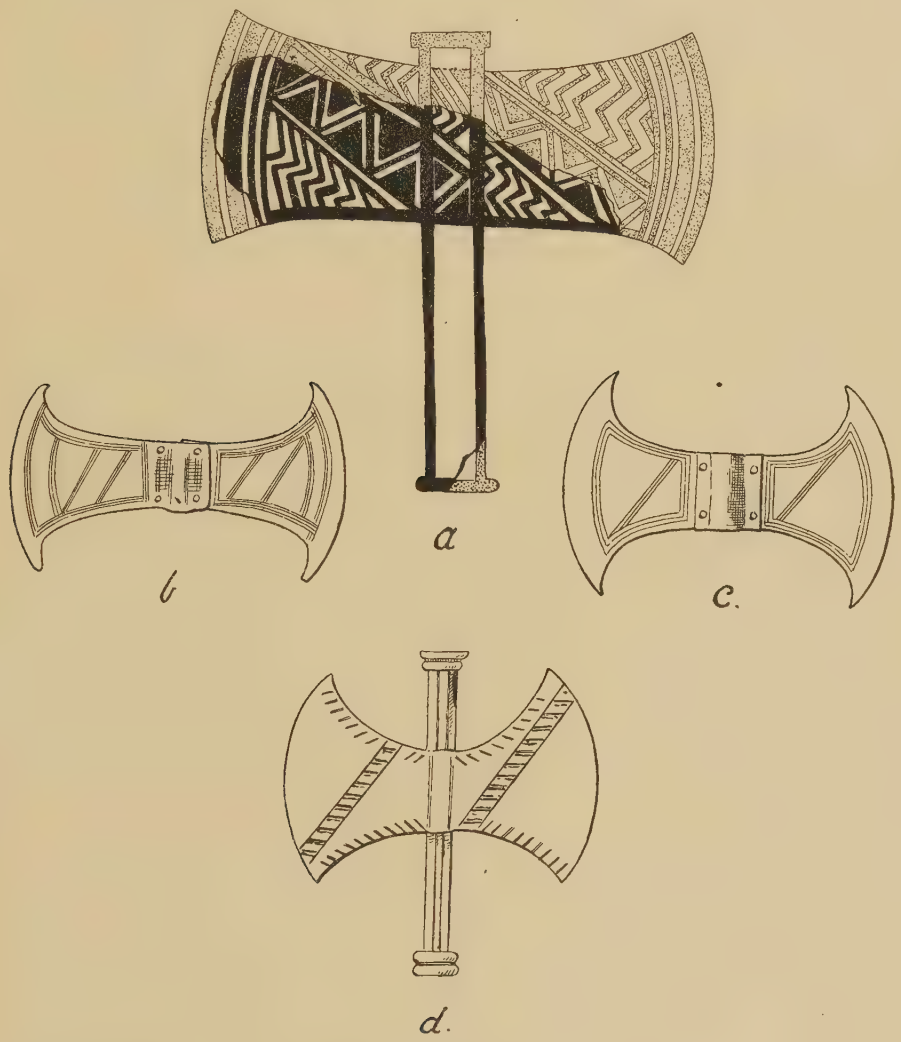


FIG. 15.

a. Double-Axe on Vase Fragment; *b*. Bronze Votive Axe from Dictaean Cave; *c*. do. (Right Wing restored); *d*. Double-Axe on Gem (enlarged).

therefore to suggest that the derivation of Labranda and of Labyrinthos

[1] *J.H.S.* 1900, pp. 106–109. In the separate publication (Macmillan and Co. 1901), pp. 8–10.

as proposed by Max Mayer and Kretschmer[1] might be taken in its most literal sense as "the place of the *labrys*." Two discoveries made this season in Eastern Crete have gone far to confirm the view that the double-axe as well as the column could be directly worshipped as a "baetylic" impersonation of the God. One is a gem impression discovered by Mr. Hogarth at Zakro, in which a female figure is seen in the act of adoration before a double-axe in an elevated position.[2] The other is the painted side of a Mycenaean sarcophagus discovered in Eastern Crete, in which a pillar with a slab at top forms the support of a double-axe with the "horns of consecration" before it. An adjoining panel shows a griffin and furthe examples of the horned cult object.[3]

§ 18.—Frieze and Fresco Fragments from Structure above First North-West Angle of the West Wall.

In several of the basement spaces enclosed by what may be described as the first north-western angle of the West Wall of the building were found considerable remains of a kind of frieze or band of reliefs, of a porphyry-like limestone, together with other architectural fragments of the same material. A portion of the relief band, of which the pieces fitted together, is given in Fig. 16.

It will be seen that it belongs to the same class as the inlaid alabaster band from the vestibule of the Palace at Tiryns, and the friezes found at Mycenae, as well as that depicted on the small Temple Fresco of Knossos itself.[4] The present arrangement, however, in which the central

[1] In the article already referred to (p. 22 note) on the "Double-Axe and the Labyrinth" (*J.H.S.* xxi. Pt. ii. p. 268, seqq.), Mr. W. H. D. Rouse betrays an obvious want of familiarity with some of the most elementary features of primitive religion, and seems incapable of imagining that Greece like other countries passed through the aniconic stage of worship. The worship of the double-axe altogether shocks his propriety. "The Greeks," he writes, "would be as likely to worship a pair of top boots.... Such exaggerated superstition was foreign to the Greek intellect" —as if the Hellenic sources of the fifth century B.C. could afford an index to the Mycenaean and still earlier Eteocretan worship of the fifteenth or the twentieth! The conclusion of the eminent philologists above cited that *Labyrinthos* is connected with *Labrys* and *Labranda*, now widely accepted among scholars, is to Mr. Rouse a mere source of merriment. "On the same principle," he writes, "Fluellen undertook to prove that Alexander was a Welshman; there is a river in Monmouth and there is a river, look you, in Macedon also."

[2] See below.

[3] See below.

[4] *J.H.S.* 1900, p. 192 and Plate.

band of the "triglyph" between the elongated half rosettes, is formed of a succession of spirals, finds its nearest parallel in the small glass paste relief, from the beehive tomb at Menidi. In the Temple Fresco we see a relief of this kind placed below the opening of a pillared chamber. A more detailed study of the architectural fragments found with the stone frieze may eventually throw some light on its position here.

Amongst other fragments in the same material found in this angle of the Palace Wall were parts of a huge bowl-shaped vase and the volute shaft of a small column with a spiral band running up it, the centre of which is formed by a chain of spirals like those of the "triglyphs" of the frieze.

FIG. 16.—PARTS OF A FRIEZE OF PORPHYRY-LIKE STONE WITH RELIEFS.

There can be no doubt that these varied architectural and sculptural remains indicate the existence of an important structure at this angle of the Western Wall, and it is possible that it was owing to the necessity of giving additional support to this that the platform of large blocks, apparently serving the purpose of a buttress, was here set against the corner of the wall-foundations.

There is every reason for supposing that a series of painted stucco fragments found on or near the edge of the Western Wall at this point belonged to the same structure as the stone frieze and other architectural remains. The principal subject of these wall paintings were zones of

human figures which when perfect must have been about a fifth the natural height. The figures, for the most part in a very fragmentary state, were more carelessly executed than the Cup-bearer or those of the miniature frescoes. The zones in which they were arranged were bordered above by triple bands of black, red and white, and the figures themselves were set on blue and yellow fields.

Incomplete as is the information to be derived from these fragments it is interesting as supplying some quite new aspects of the costumes as worn in Mycenaean Knossos. The bust of a girl (Fig. 17) characterised by a very large eye and brilliant vermeil lips as well as by the usual curling black hair displays a high-bodied dress of quite a novel character. It is looped up at the shoulder into a bunch—blue with red and black stripes—from which the fringed ends hang down behind, while a border of the same robe adorned with what are apparently three smaller loops is carried across the bosom. Within this border the white flesh colour is shown between narrow blue and red bands, indicating that this part of the dress was diaphanous. The men, distinguished by their conventional red tint, seem to have been clad in short-sleeved tunics, blue and yellow with black stripes, which descend to their ankles. A part of a seated figure preserved has two wing-like ends of the same material falling down behind the shoulders.

Two of the fragments show goblets held in men's hands. Both of these are of the high-stemmed type presenting in outline some resemblance to a champagne glass, but with a handle on either side of the rim. The colouring of these, blue and orange respectively, implies, according to the usual convention of the Knossian artists, that the materials of which they were composed were gold and silver. Another fragmentary painting represents the lower part of what seems to be a much larger vessel in which these two precious metals are combined.

§ 19.—THE NORTH-WEST ANGLES OF THE WALL AND THE NORTHERN PALACE QUARTER.

Beyond the first north-west angle of the building, marked by the buttress platform of large blocks, its outer wall takes a turn of a little over 6 metres to the east, and then north again for 13·40 metres to a second north-west angle. From this corner[1] again it runs east for 15·20 metres

[1] Just east of this corner the foundations had been a good deal injured. They have been since repaired.

FIG. 17.—FRESCO PAINTING OF GIRL (⅔).

to a point in a line with the West Wall of the Long Gallery. Owing to the comparative denudation of the surface on this side the limestone plinth and large gypsum blocks that formed the base of the wall overlooking the West Court are here wanting, and all that is preserved are the smaller faced stones that characterise the foundation structure. This foundation wall went down 1·30 metres along this section.[1] A good idea of this part of the North Wall is given by the general view on Plate II.

Beyond this there is a break in the regular line of masonry, and there are clear indications that the outer wall here originally took another turn to the north, forming a prolongation of the line of the West Wall of the Long Gallery. Owing to the slope of the original surface this northern turn of the wall probably took a step down, but its course can at present only be traced by remains of later wall. These later remains (see Pl. II.) indicate that, after running north about 10·50 metres from this angle, it again turned east towards the lower part of the Northern Entrance passage.

At the same time an interior wall of different construction, but forming a continuation of the line taken by the first section of the outer North Wall, runs parallel to this second section towards the centre of the northern passage way, the doorways opening on the Northern Portico being on this line. The first part of this cross wall, which starts from opposite the north end of the Long Gallery, has for a length of 24·15 metres fine limestone blocks superposed on two somewhat irregular courses of gypsum blocks (see Pl. II.). The wall is 2·20 metres in height and seems to have formed the support of an upper terrace.

It will be seen that this Terrace Wall together with its continuation along the Northern Portico forms the southern boundary of what must have been a very distinct quarter of the building. This Northern Quarter formed a rectangular area bounded to the west and north by the original course of the outer wall and to the east by the walls and bastion that guard the Northern Entrance way on this side.

The eastern part of this area is largely occupied by the Northern Portico already partly explored last year and by the small paved piazza on which it opens. This North Piazza was found to abut on its western side on what seems to have been a large bath with accessory chambers.

[1] A puzzling circumstance was the discovery at the base of this wall of a tough flooring of clay and red potter's earth. It perhaps belonged to some outside cellar of later construction.

On the borders of the Portico, in the corner near the bath-chamber and the "Threshing-floor Area" to the south of it, were found further remains of the tumultuary heap of deposit partly excavated last year containing fragments of painted stucco. Among the more interesting pieces discovered is part of the head of a cat-like animal with a yellow ground and white brown-bordered spots. Lying near it was another fragment exhibiting the body and the underside of the wing of a gaily plumaged bird in the act of flying. It is probable that both cat and bird formed part of the same fresco design based, like the well-known representation of the dagger blade from Mycenae, on an Egyptian Nile piece showing cats hunting water-fowls. The influence of this Nilotic cycle on the engraved gems of Mycenaean Crete is also very noticeable. We not only find water-fowl amidst papyrus clumps but in one case a cat pursuing them.

Among the naturalistic subjects of these fresco fragments were grasses of red, blue and grey on a white ground and parts of olive leaf borders. Spirals, rosettes, the wave and wavelet, and quatrefoil combinations, like that of the Cupbearer's robe on a larger scale, were among the decorative designs. One fragment seemed to represent double pipes and another a part of a sphinx or griffin. Some of the pieces were in relief, including a part of a man's leg near the thigh, life-size and showing the loin cloth. But of all the moulded fragments the most beautiful were rounded bands with a polished turquoise surface broken by fine white chevrons alternating with dotted returning spirals.

Outside the north-west angle of the Palace and the western part of this Northern Quarter are remains of a paved court with good rough limestone flags. This is separated from the second section of the North Wall by an interval of about 8 metres and itself forms a strip some 6 metres broad. As the remains of later structures were cleared away between it and the Northern Wall it is possible, however, that the pavement may originally have come up to it like that of the Western Court. This northern paved area is bounded on the west by the long outside building already described as containing fine pieces of early Kamáres pottery. At a little distance from this structure came to light a very large limestone block which had evidently formed half the arch of a "Cyclopean" gateway. The extremely massive character of this block points to a very primitive construction. It is possible that it may have originally formed part of the northern gateway of the Palace. Remains of a causeway

similar to those of the Western Court were traceable running from west to east along this northern paved area. It is probable that a continuation of this formerly led down to the Northern Entrance.

§ 20.—THE NORTHERN AND SOUTH-EASTERN BATHS.

On the western side of the Piazza outside the Northern Portico, partly obscured by later walls, were the gypsum jambs of a fine double entrance leading to what must certainly be regarded as a large bath and its accessory chambers. All this bath system belongs to the original structure of the building, but this and, as we shall see, the adjoining chambers had been destroyed by some catastrophe that took place at an early period in the history of the Palace. The basin of the bath itself had been filled up and was crossed by two later walls running from north to south, and two others from east to west. The foundations of these partly rested on the upper surface of the tank-walls. On the south side of the tank, however, where its wall follows that of the Upper Terrace Wall, described in the preceding section, there was distinct evidence that the later structure had only followed at a considerable interval after the destruction of the bath. For here, a metre from the top of the Terrace Wall, were still adhering parts of the painted wall stucco and cement pavement of a later chamber separated from the top of the tank by a metre of deposit which must have accumulated after its destruction and complete filling up. Yet this later construction is itself of very early date. The wall-stucco, in fact, shows remains of fine spiral decoration belonging to the good Mycenaean period.

The later walls above the top of the tank having been removed, it was possible to recover almost the whole original construction. The gallery or chamber to which the right-hand doorway, entering from the Piazza, had once led, had completely disappeared. The other doorway on the other hand opened directly on a passage which, passing by the door jambs of a small room on the left, led down by a double flight of steps to the square basin of the bath. A parapet descending step-wise, cased by gypsum slabs,[1] followed the inner side of the stair-way and terminated below in a gypsum pillar supporting a column-base. This gypsum pillar was 72 centimetres

[1] Several of the upper slabs of these were found in a disintegrated condition, and have been replaced in order to preserve the rest of the parapet. The walling of the parapet within the slabs was of clay and rubble.

high and 57 square, and showed on its upper surface dowel holes corresponding with others in the lower surface of the column bases. The column base itself was formed of a cylindrical drum 37 centimetres in diameter on a square block rising in a double step, and it had probably supported a wooden column. The steps, only a few of which were preserved, were 90 centimetres broad, and were separated from the inner slabs of the parapet by a low plinth, 34 centimetres in width.

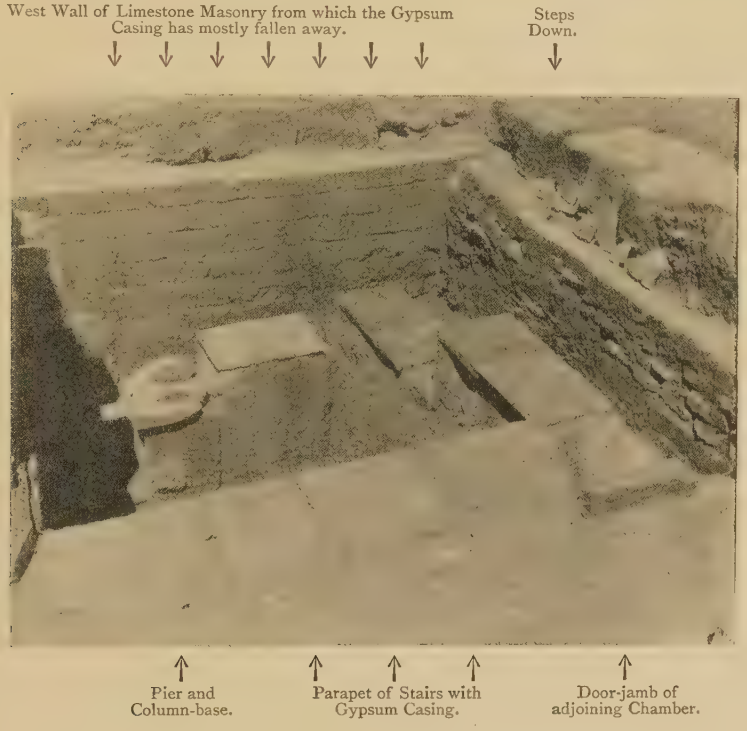

West Wall of Limestone Masonry from which the Gypsum Casing has mostly fallen away.
Steps Down.
Pier and Column-base.
Parapet of Stairs with Gypsum Casing.
Door-jamb of adjoining Chamber.

FIG. 18.—NORTHERN BATH LOOKING NORTH-WEST.

The inner basin of the bath was nearly square (2·56 × 2·45 metres) and 2 metres deep. The walls were composed of closely fitting rectangular limestone blocks faced with large gypsum slabs 2 metres high, and from 1 to 1·30 metres broad. On the west wall the gypsum facing had become disintegrated, thus exposing the fine ashlar masonry behind (see Fig. 18). The floor of the basin was formed of finely compacted gypsum slabs. Inside the basin were found fragments of painted plaster, with a dark

bluish green ground and reddish stripes. The sombre tones of these fresco pieces show that they belonged to the earliest style of fresco painting represented in the Palace—nearer in date to the Kamáres than the developed Mycenaean Period. It had no doubt decorated some part of the original superstructure of the bath.

It will be seen that this Northern Bath with its descending stairs, parapet and column base, and the fine gypsum lining of its walls, presents some obvious analogies to the smaller basin on the south side of the Throne Room. There is, however, an essential difference. The arrange-

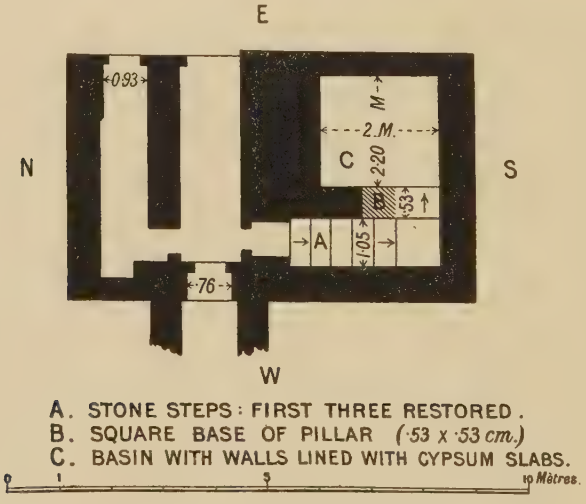


FIG. 19.—PLAN OF SOUTHERN BATH.

ment of the Throne Room with its triple columns and the light-well beyond represents the essential type of the Cretan Megaron as already noted above. In the Hall of the Colonnades to be described below we shall see on a much larger scale the same system of a parapeted staircase descending to the light-well in front of the three supporting columns of the Megaron, but the rain-water that fell into this instead of being collected made its escape through a drain. In the case of the Throne Room on the other hand the light-well has been used as an *impluvium* and the space under it is sunken so as to serve as a kind of shallow basin, perhaps for some foot-washing function. The bath here in fact—if such we may describe it—is subsidiary to the chamber. But the Northern Bath with

its much larger basin belongs to a different category. In this case the bath is evidently the principal object. The small adjoining room is quite secondary.

This type of the stone basin with descending stairs, parapet and pillar has now found other parallels. In the extreme south-eastern Palace region there was this year discovered another small bath of the same general plan, preceded by a small anteroom, or rather a double gallery, which is partly also a passage way (Fig. 19). The basin was here 2·20 metres square, lined and paved as usual with gypsum slabs. It was approached by a stepway provided with a separate door and flanked by a parapet ending in a square pillar. As there were only four steps down from the doorway the depth of the water in the basin must have been very shallow and here too was probably used in the oriental fashion for washing the feet. A small chamber of much the same construction with a doorway, four steps flanked by a parapet ending in a column base, and a shallow square basin has now been discovered by the Italian Mission in the Palace of Phaestos.[1]

A common peculiarity characterises all these basins. There is no visible inlet or outlet for the water. In the case of *impluvia* like that beside the Throne Room the rain-water collected from the roof may in certain seasons of the year have provided an adequate supply. But in the hot summer climate of Crete with its long droughts, these basins could not have been permanently filled in this way. It seems probable that the water was in most cases introduced into them by means of slave labour, and that when this became foul the bath was emptied by the same agency.

§ 21.—DISCOVERY OF ALABASTER LID WITH CARTOUCHE OF HYKSÔS KING KHYAN AND LAPIS-LAZULI CYLINDER.

Bordering to the west on the later walls above the Northern Bath and forming part of one system with them were other later structures of the same rubble masonry. About 6 metres from the borders of the bath-basin on this side a wall of this kind abuts at right angles on the Upper Terrace foundations described above. This rubble wall, which runs north, shows on its western face the lower part of a painted stucco dado with blue and

[1] *Lavori eseguiti a Festos dalla Missione Archeologica Italiana. Relazione del Dott. Luigi Pernier* (Roma 1901), p. 16, No. 19 on the plan.

yellow bands, while from beneath this, at a level of 60 centimetres below the level of the top of the neighbouring Terrace Wall, jutted out parts of a cement pavement. We have here then the remains of a Mycenaean floor-level contemporary with that showing the painted stucco walling and clay pavement above the south margin of the bath-basin.

The wall-foundations went down about 30 centimetres below this

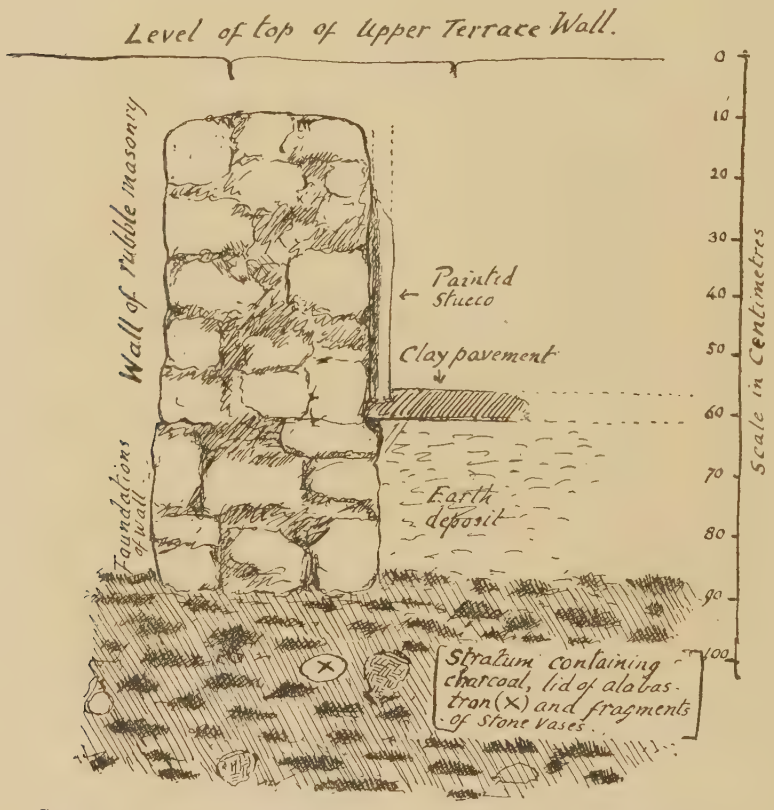


FIG. 20.—SECTION SHOWING STRATUM CONTAINING EGYPTIAN LID WITH MYCENAEAN WALL AND FLOOR LEVEL ABOVE.

floor-level, and rested on a well-marked archaeological stratum (Fig. 20) containing a large proportion of charcoal and representing the burnt remains of an earlier structure.

In this deposit immediately under the Mycenaean wall-foundations, at a depth of 40 centimetres below the later floor-level, and at a distance of 3

metres from the Terrace Wall, a remarkable discovery was made. This was the lid of an Egyptian alabastron upon the upper face of which was finely engraved a cartouche containing the name and divine titles of the Hyksôs King Khyan (Fig. 21).

The inscription, about which there is no difficulty, reads *Ntr nfr*

FIG. 21.—LID OF ALABASTRON WITH CARTOUCHE OF HYKSÔS KING KHYAN.

s. wsr-n-R', *s R'*, *Ḥy'n* [1]—"The good God Suserenra, son of the Sun Khyan."

The appearance in this early Palace stratum at Knossos of a record of King Khyan, is of exceptional interest from the fact that another monument of his, a lion of black granite, now in the British Museum, was found as far afield as Baghdad. In Egypt itself, with the exception of some scarabs

[1] I have followed Mr. F. Ll. Griffith's transcription, *Archaeological Report of the Egyptian Exploration Fund*, 1900–1901, p. 37. Mr. Griffith informs me that the form of the *user* sign seen in this inscription is not found elsewhere "except occasionally in the cartouches of the clearly Hyksôs Apepi and of Rameses II., who may have imitated it."

and two cylinders, the only records of this King are the base of a statue at Bubastis, and his cartouches on a black granite block at Gebelen.[1] The *Ka* name of Khyan *anq adebu* "embracing territories"[2] and his further title "ruler of foreign peoples," as well as the Baghdad lion, point to extended dominions. In this latter title, *Hq-ḫ's-wt*,—also borne by another Hyksôs prince—a plausible derivation for the name Υ̓́κσως itself has been found.[3]

The name of Khyan like that of other Hyksôs rulers appears to be Semitic. The suggestion has been made that Khyan is to be identified with the XVth Dynasty Hyksôs King Ιανιας or Ιαννας, whose name is taken from Manetho by Josephus.[4] In that case his date would be about 1800 B.C.[5] In any case this is the earliest monument of a King of Egypt yet found on an Aegean site. It seems probable from the occurrence of this alabaster lid in the "pre-Mycenaean" stratum of the Palace at Knossos that its Minoan lord was in direct relations with the Hyksôs King. In the Egyptian monument found in the early stratum of the Central Court during the preceding campaign, we may see further evidence of very early Egyptian relations, if, as is the opinion of most Egyptologists, this must be referred to the period of the XIIIth Dynasty.

The well-marked deposit in which this lid occurred, contained numerous fragments of stone vases, which differed both in their form and decorative reliefs from the stone vases of developed Mycenaean style found in some of the chambers. The outer surface of these vases was covered with a very realistic plait-work in relief—in fact a complete stone imitation of basketry. One vase that it was possible to restore, presented a pear-shaped outline with a small base and a fairly wide mouth surrounded by a ring in

[1] See Petrie, *History of Egypt*, i. p. 118 seqq. Professor Petrie on the ground of his scarab style was inclined to place the date of Khyan as early as the Tenth Dynasty. But as is pointed out by Mr. Griffith, *loc. cit.*, the excavations of Mr. Mace and Mr. Garstang have now shown that this group of scarabs must be placed between the Twelfth and Eighteenth Dynasties. Mr. Percy Newberry who has been collecting further materials regarding the Hyksôs scarabs informs me that he has arrived at the same conclusion. A general consensus of Egyptologists now brings down the reign of Khyan to the Hyksôs period, and it must be said that the evidence of the Knossos find confirms this conclusion.

[2] Petrie *op. cit.*, p. 120.

[3] W. Max Müller, cited by Griffith, *loc. cit.*

[4] Mr. Griffith remarks, however, that none of the other scarab kings can be identified with names in the Josephus list.

[5] According to Petrie's chronological table, *History of Egypt*, I, 236, the approximate date of Ianias would be 1837 to 1787 B.C.

prominent round relief. The plait-work grows gradually smaller towards the base of the vase. It is interesting to note that stone-vases with raised plait-work ornaments are very characteristic of the earliest dynastic period of Egypt, as illustrated by Mr. Petrie's most recent excavations in the Royal Tombs of Abydos.

It has been pointed out above that, if Khyan and the Hyksôs King, Ianias of Manetho and Josephus are the same persons, the date of the alabastron must probably be referred to the latter part of the nineteenth, or the beginning of the eighteenth century B.C. The minimum date to which it is possible to refer it, can in any case hardly be lower than 1700 B.C. In the absence of strong evidence to the contrary we may conclude that the alabastron bearing the name of a king, whose records are so rare in Egypt itself but whose foreign relations are known to have been so extensive, reached the Palace of Knossos during his lifetime. On the other hand, the early phase of Mycenaean civilisation represented by the chamber built above the earlier stratum in which the lid lay, shows many points of contact with the Egypt of Thothmes III. Yet this later structure, which may thus be taken to go back to the fifteenth or sixteenth century B.C., was separated by over a foot of deposit from the more ancient Palace layer. From this evidence alone we may conclude that the partial catastrophe of which we have here the traces, in all probability took place at an earlier date than the minimum time-limit above indicated. These arguments equally apply to the original upper rooms of the adjoining bath chamber, which must have been destroyed and the basin itself choked with their *débris* at the same time. The characteristic structure of that chamber, with its fine gypsum slabs, belongs therefore to a period anterior to the approximate date of 1700 B.C. This result has a very important bearing on the date of the early part of the Palace fabric as a whole, which corresponds with that of the bath-chamber.

These chronological conclusions may find support from a further discovery made in the space intervening between the deposit containing the lid and the back of the bath. Here were the remains of a solidly-cemented rectangular receptacle, apparently a cistern. It was of rubble structure, belonging to the same Mycenaean date as the later walls on either side of it, and a wall abutting on its south face showed the usual wall-stucco still clinging to it.

At the base of the western side of this cistern, about two and a half

metres from the spot where the engraved lid was found, and embedded in the rubble material, was a cylinder of lapis lazuli, mounted at each end with gold caps bearing filigree decorations. The cylinder had evidently got into its position at the base of the Mycenaean wall from an earlier deposit, perhaps not far removed in date from that containing the relic of Khyan.

The cylinder itself seems to represent the prototype of a characteristic Hittite series. It is divided into two zones, a larger below with mythological scenes and a smaller band above showing winged monsters, one of them a sphinx, and disks with or without inner radiation. The lower zone shows a beardless male figure in a long flounced robe between two groups, one of the man-bull Hea-bani and a lion crossed, the other of a lion and a bull also crossed, while the circuit is completed by Hea-bani grappling with another lion. The style of the mythological design on the lower zone fits on to the late Babylonian series and shows no trace of distinctively "Hittite" or Syro-Cappadocian elements. On the other hand the upper band with its winged monstrous forms is clearly transitional.

§ 22.—THE NORTHERN ENTRANCE WAY AND THE ADJOINING REGION TO THE EAST OF IT.

The continued excavation of the Northern Entrance way has led to further developments which upset several of the conclusions suggested by last year's preliminary work on this part of the site. Two pieces of badly constructed wall projecting from the bastion on the west did not, as was first supposed, rest on the road level but were much later structures, built when the original passage had been covered by a thick deposit of earth. This later work having been removed the passage way was found to descend to a much lower level. The bastion itself reached down to a depth of 3·50 metres from the summit of the wall, with seven courses of good masonry. Seven courses were also uncovered of the opposite east wall which went down to the same depth. In the course of this excavation numerous fragments of Mycenaean pottery were found and some pieces of painted stucco relief including a spiral rosette forming part of the same decoration as that found last year, as well as another part of a bull's leg showing black spots on a white ground.

It had been supposed last year that the entrance way extended the

full width,—about 5 metres[1]—between the western and eastern walls, and from the step-like arrangement of some blocks in the centre, it further looked as if the whole had been a step-way. Both these conclusions are now shown to be erroneous. The actual entrance way proved to be a passage along the western wall only 2·10 metres in breadth. This was bounded on the other side by a lower wall rising in steps, the well-cut western face of which, together with the plinth at its base, symmetrically corresponds with the west wall opposite. This graduated wall, which on

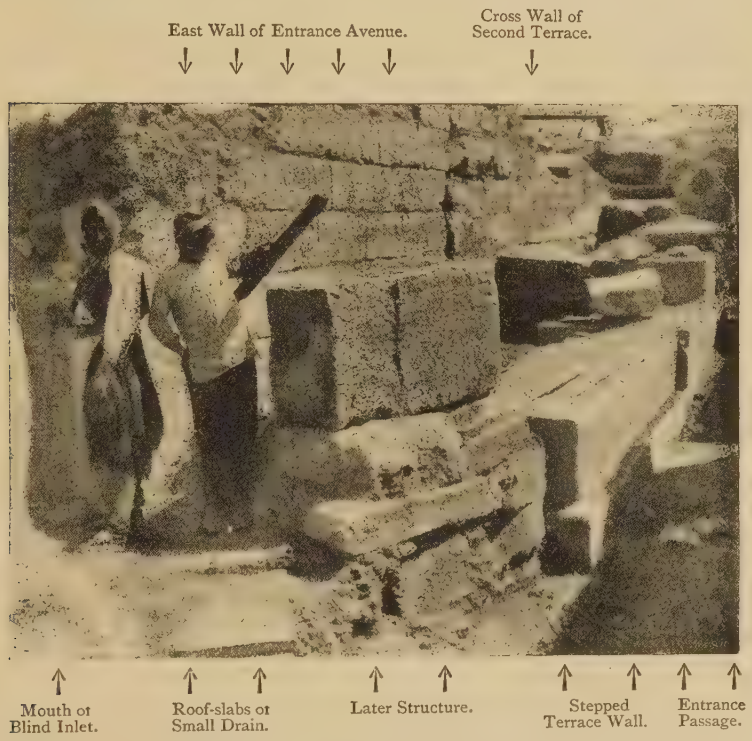


FIG. 22.—SECTION OF NORTH ENTRANCE WAY SHOWING EAST WALL AND STEPPED WALL OF TERRACES.

its east face had been left rough, proved to be the supporting wall of a series of small terraces which also rose in steps marked by cross-walls—these terraces filling the space between the entrance way and the high eastern wall to which it was originally thought to have extended. That

[1] Mr. Mackenzie gives the exact measurement as 4·95 metres.

the terraces were open above, is made probable by the discovery, at the foot of the lowermost, of a stone drain running into the larger *cloaca* which follows the course of the entrance way itself. For what did these terraces serve? It would be quite in keeping with Minoan taste as illustrated by the frescoes on the palace walls, to suppose that these earth platforms rising step-wise beside the entrance way served as small garden-plots, planted perhaps with palms and flowering shrubs.

On the west side of this entrance way are two elongated bastions, separated by a small gap which, as suggested in the preceding Report, might have been used by a sentry. The northern face of the upper of these two bastions—which is rendered visible by the gap—is seen to be provided with a plinth and to have been originally an exterior wall. It further appears that it is in line with the south wall and doorways of the North Portico—and thus with a line of wall—partly inner terrace, partly exterior—extending to the north-west angle of the building (see Fig. 23). A break corresponding with this is seen moreover, in the terrace wall on the other side of the entrance way. It therefore appears that the bastion to the north of this break and the lower continuation of the terrace walls on the other side are somewhat later additions, though still belonging to the finest part of the building. The second, or northern bastion, one of the best pieces of construction uncovered on the site, was built against and partly over a rougher wall running from south to north, which seems to have been the original supporting wall of the Northern Piazza on this side.

Beyond the Northern Bastion the architectural evidence becomes very complicated. (See Plan: Fig. 23.) An opening here appears in the west wall line of the Entrance Way opposite the blind inlet on the eastern side, and perhaps like it intended to serve as a place for guards to sally out from upon hostile intruders. Its mouth had been blocked by a later wall. On the northern side of this opening a door jamb is visible, and on the opposite side of the Entrance Way is another answering to it, somewhat out of place.

Beyond this opening a further section of the west wall, of good construction, extends 5 metres to another smaller break, perhaps originally giving access by means of stairs to the Northern Piazza. At this point the Northern Entrance Way was found to be entirely barred by a cross-wall. Since however this is not so well built as the western side wall on which it abuts, and since the further course of the Entrance Way and of

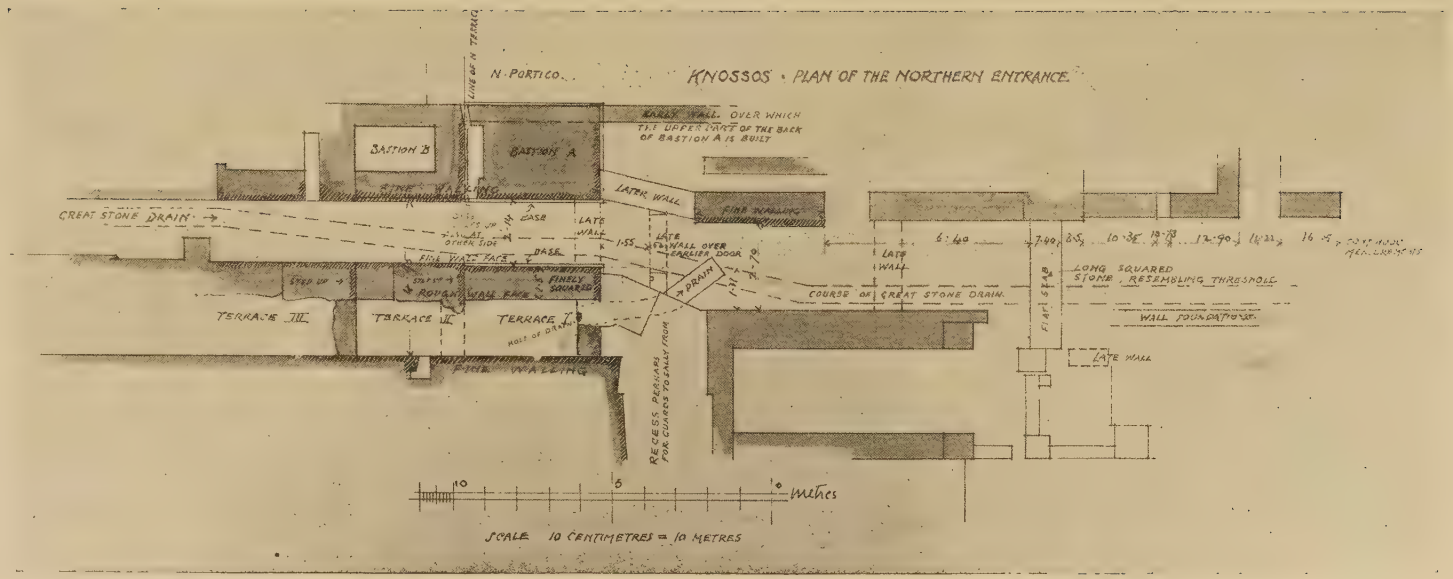


FIG. 23.—PLAN OF THE NORTHERN ENTRANCE.

the drain beneath it continues uninterrupted beyond this point, it is obvious that this cross-wall represents a later block. About 5 metres north of this a flat slab, the object of which is uncertain, lies across the entrance passage from wall to wall. The western wall continues beyond this point and is composed of good limestone blocks resting on a plinth. The great stone drain or *cloaca*, which here follows the eastern border of the Entrance Way, loses itself at a point 36 metres (120 feet) distant from its upper opening.

The eastern wall of the lower part of the entrance passage from the blind inlet onwards is also preserved, but is not of such good construction as that on the west side. East of it again are two elongated chambers that have the appearance of Magazines. From their proximity to the Northern Entrance it is possible that these should be regarded as stables for the horses and chariots which occupy such a prominent place in the Palace archives.

Eastwards again a line of wall which forms the back-wall of these elongated chambers is continued to another projecting bastion with a narrow door opening. This doorway leads into what appears to have been a short gallery, the west wall of which is constructed of good limestone blocks. It seems to have led to two flights of steps, one directly facing, of which traces only are preserved, ascending south, the other, of which four steps remain,[1] approached by a turn to the east. The structure here has been a good deal dismantled, but it looks as if we had to do with a postern gate giving access to the north-east quarter of the Palace from the north.

From this point the Northern Wall becomes no longer traceable, and the investigations so far made on this side lead to the conclusion that the north-eastern angle of the building has been completely denuded. North of this point, however, there came to light a Magazine with remains of large pithoi and part of a large structure which may eventually be found to stand in direct connexion with the Palace.[2]

§ 23.—THE NORTH-EAST MAGAZINES.

About 9 metres south of the easternmost section of the North Wall, and within the angle which it makes with the east wall of the Entrance

[1] These steps are 1·50 metres wide, ·15 high and ·50 deep.

[2] The star and branch signs are visible on its blocks.

Passage, quantities of plain clay vases of various forms began to appear, only a few centimetres from the surface of the ground. It was found that these vases were methodically arranged within the rubble walls of a group of Magazines forming a square separate enclosure with a single entrance. These Magazines were grouped in uneven divisions on either side of a narrow gangway 90 centimetres in width—an arrangement which recalls on a much smaller scale that of the Magazines of the Palace at Phaestos, except that there the chambers on either side of the central gangway were of equal dimensions. A similar arrangement may be traced back on Egyptian soil to the earliest Dynastic Period.

Like the Magazines themselves, the vases here were of much smaller dimensions than the great pithoi of the Magazines of the western Palace border. Except for a limited class with brown streaks running down from their rim, the walls of these vessels were plain and unpainted. They were arranged along the walls in regular rows and piles, those with broad rims socketed into one another and the cups in *rouleaux*. A general idea of their prevailing types and distribution may be gathered from the accompanying sketch-plan (Fig. 24).

Except where these vessels had been cracked or crushed by the weight of the superincumbent earth, they stood piled in their places absolutely intact, as when left by their Mycenaean overseer. It is obvious from this, and from the fact that the whole lay immediately under the surface of the ground, that no excavation had ever taken place in these chambers. That there was so little earth left to remove was due to the natural process of denudation, which has gone on for the last 3500 years or so at this part of the north-east slope.

It will be seen that in their plain fabric, as well as in some of their typical forms, these vessels correspond with those found in the chamber near the south-west corner of the Palace, upon one of which was found the graffito inscription in linear characters. Here as there too the survival of the older Kamáres types is perceptible, but in a somewhat degenerate form and bereft of the beautiful painted decoration which characterises the vases of the Kaselles.

In the case of the chamber on the south-west corner an indication of the Mycenaean date of this rustic ware was given by the inscription in advanced linear characters, identical with those associated elsewhere with Mycenaean gem impressions found in the Palace. In the present instance

the same indication is supplied by the contents of the small inner chamber, 5 in the sketch plan, opening from the back of Magazine No. 4.

In this inner chamber was found, ·70 centimetres beneath the surface, a

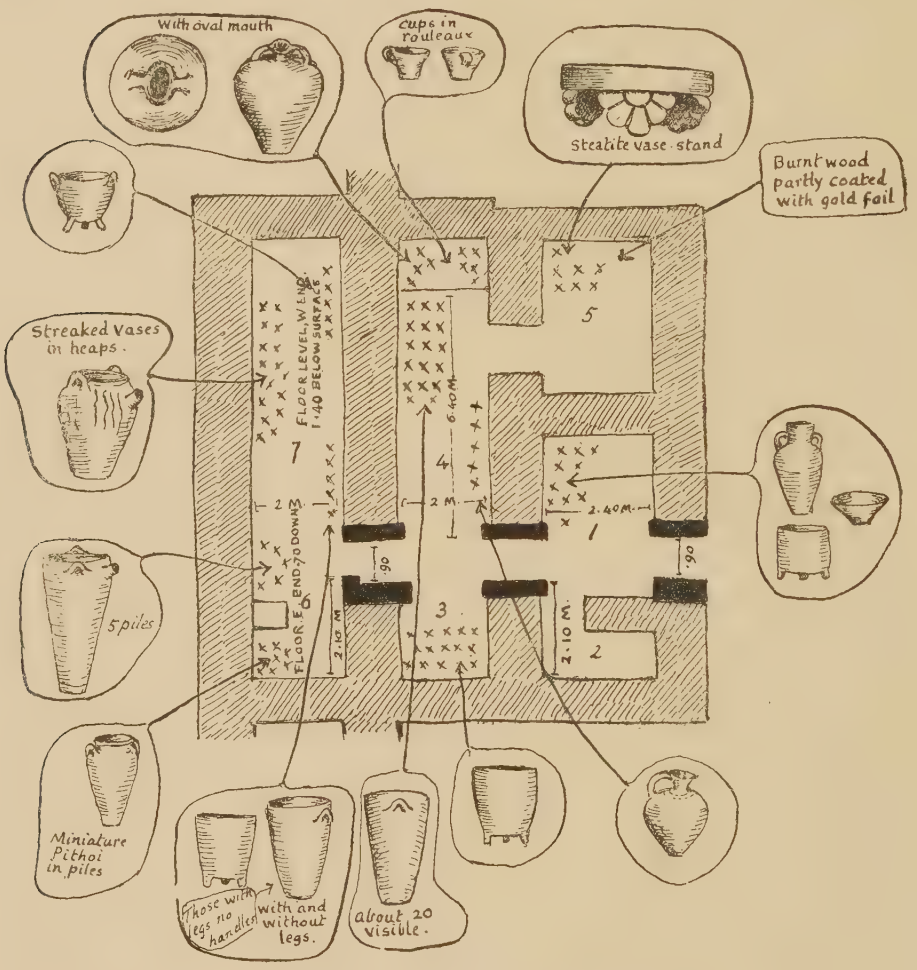


FIG. 24.—THE NORTH-EAST MAGAZINES AND CONTENTS.

very beautiful tripod-stand of dark steatite, the legs of which[1] were designed in the form of palmettes or half rosettes of the Mycenaean type. Below this were remains of charred wood coated with gold foil.

[1] Two of the legs were damaged.

It is obvious that the tripod-stand was designed as a support for some vase of stone or metal of a very different class from the rustic pots in the adjoining Magazines. The one deposit speaks of wealth and luxury, the other connects itself with the needs of a quite lowly condition. We know, besides, what magnificent painted ware was at this time in use among the Knossian lords. It looks as if these stores of rustic vessels, representing the survival of the indigenous potters' style, were kept to supply the wants of a numerous colony of handicraftsmen, and perhaps of slaves, living within the Palace walls. Whatever new elements may have intruded themselves among the dominant caste, these humbler denizens, as the traditional types of their pottery show, belonged to the old Eteocretan stock.

East of these Magazines, and between them and the Eastern Terrace Wall, to be described below, was a great heap of sherds and small pots, for the most part of plain earthenware, probably belonging to the same, more or less servile class. From the abundance of small clay cups of the usual type found in Cretan deposits of advanced Mycenaean character, it is probable that this waste heap belonged, in part at least, to a somewhat later period than the contents of the Magazines. Near it was found the small steatite relief exhibiting an archer.

§ 24.—THE NORTH-EAST HALL AND CONNECTED ROOM SYSTEM.

South of the small Magazines described in the preceding section, for over sixty metres, stretches a continuous line of galleries and chambers, the western limits of which mark the original line of the Central Court on this side.

Immediately bordering on the Magazines is a group of rooms forming parts of a single connected system. The eastern member of this group is a rectangular hall, of the east and south walls of which only indications remain. The original interior dimensions of this north-east hall were about 9 by 6·50 metres, and at a distance of 1·10 metres from its north wall are two column bases 70 centimetres in diameter.[1] Near these, at the north end of the hall, opens one of the usual double doorways,[2] with gypsum jambs,

[1] The column bases are 1·40 metres apart.

[2] The south door jamb and a central one with a double reveal had been preserved. The northern door jamb, however, and the small adjoining return of the wall, had disappeared. The width of the south doorway was 82 centimetres.

leading to a smaller inner chamber of oblong shape. The pavement of the North-East Hall is of gypsum cement, and near the floor level were found one or two Mycenaean vases. One of these is a somewhat low "Stirrup" vase with a design of a fish, and of much better fabric than those described above exhibiting octopus designs. Another vessel is a cup which presents the early characteristic of having decorative bands of white as well as brown.

The small room to which the double doorway gave access had been somewhat obstructed by a later cross-wall running east and west, the base of which was 30 centimetres above the floor-level. In its original form however, the room had been of an elegant character, the lower part of the walls being covered with a dado of fine gypsum slabs about 95 centimetres in height, and the floor paved with the same material. This "Room of the Gypsum Dado" was 5·08 metres by 2·65 in dimensions. Near its north wall were found the remains of two steatite lamps of the ordinary kind with high columnar stands. An opening at the north end of the west wall of this room gave access, in front and to the left respectively, to two small Magazines or store-rooms. That to the left contained the remains of a small pithos, some two-handled jars of rustic fabric, resembling types found in the neighbouring North-East Magazines a small plaster seat and a tripod stand of the same material. The elongated store-room in front contained other rough pots representing the same Kamáres tradition as those of the small Magazines together with a vase belonging to an early Mycenaean class.

This arrangement of a room with small magazines opening from it is one that has been already met with in the western quarter of the Palace in the case of the Rooms of the Chariot Tablets, of the Column Bases and the Throne Room itself. Additional examples of the same arrangement will be seen in the "School Room" and other chambers of the eastern slope to be described below.

The North-East Hall apparently had its entrance on its eastern side, where it seems to have been flanked by a corridor running north and south. Near the south end of this, and at the south-east extremity of the hall, are visible four low steps ascending west, and indications of a passage leading hence round the outer walls of the group of rooms described above to the Central Court. Some five metres above the four steps preserved are traces of others turning north between passage walls of good limestone

construction. About the same distance further on the same passage takes another turn west, past a massive bastion, and thence by another angle seems to have found its way to a point near the upper opening of the Northern Entrance Way.

§ 25.—THE ROYAL GAMING BOARD.

Nearly opposite the lower opening of the North-East Stairs described above, against the east wall of the Corridor on which it abuts, and of which only remains of the lower courses exist, was made a very interesting discovery. Here, at a depth of 70 centimetres below the surface, some fragments of crystal and ivory were thrown up by the workmen from the earthy deposit. On careful examination these were found to belong to the end of a kind of inlaid board, the component parts of which were still largely in position.

The board lay somewhat unevenly near the paved surface of the Corridor, separated from it by a shallow earthen layer, into which, however, some fragmentary slabs had intruded. To raise these highly friable remains, embedded in the crumbly earth, from this irregular backing without breaking up the framework was a matter of extraordinary difficulty, there being no room in this case for the ordinary under-plastering that had been so effective in getting out the Cup-bearer fresco. As a preliminary measure it was found necessary first to surround the outer margin with a wooden framing, filling up the interstices with plaster. This having been successfully executed, and the edges of the board thus secured, wooden strips with plaster over them were gradually introduced below, as the irregularities of the broken slabs permitted. This part of the process was extremely difficult, and it was only after three days' work, and mainly owing to the skill and patience of my trained *formatore,* Kyrios Papadakis, that the whole was finally raised with the inlaid designs in the position in which they had been uncovered.

The framework had already suffered especially round the borders and at what may be called the upper end of the board, where the pick had originally disturbed it. Enough, however, remains of the original design to supply a correct idea of the whole arrangement of its essential parts.

In Fig. 25 [1] the existing parts in position are given in a darker tone,

[1] From a coloured drawing carefully executed by Mr. Fyfe, who has completed the disintegrated and missing parts of the design in accordance with my suggestions.

but it must also be borne in mind that a great deal of the rest was found, though in a more or less disintegrated state. The outer zone, with the marguerites, had been entirely broken off; their fragmentary remains, however, were abundant, and as reconstituted above, form a natural frame to the design. The remaining parts of the nautiluses were also found detached, but their dimensions so exactly correspond with the vacant rectangular spaces on either side of the square containing the uppermost medallion, that their position may be taken as ascertained. The restoration of the interior of the smaller circles of the lower half of the board rests on more conjectural grounds. The board as completed is 0·965 metre in length and 0·553 wide, and it is to be noted that several of the component parts are exact multiples of the whole. Thus the diameter of the larger medallions answers to $\frac{1}{8}$ of the length, that of the smaller medallions to $\frac{1}{11}$, that of the marguerites to $\frac{1}{24}$.

The framework of the board consists of pieces of ivory set and originally entirely covered with thin gold plate. A good deal of this gold foil is visible in the interstices and here and there are ragged pieces partly overlapping the face of the ivory plaques. It is possible that the gold had been worn away by use or it may be that at the time of the destruction of the Palace the superficial metal had been hastily and imperfectly scraped from the board. This chryselephantine framework contains a further mosaic of strips and disks of rock crystal, the crystal in turn being alternately backed with silver plaques and a blue paste formed of pounded lapis-lazuli-like glass, the Homeric *kyanos*, and both this and the silver plaques are underlaid with gypsum plaster. It is probable that for the support of the ivory framework there was also a wooden panel below, but the traces of this had entirely disappeared. Some pieces of ivory reliefs, including smaller nautiluses for which there is no place on the board itself, point to the probability of there having been ornamental sides below; the analogy moreover of Egyptian draught-boards and of the Mycenaean specimen found at Enkomi in Cyprus suggests that the board itself may have also served as the top of a box that once contained the pieces of the game.

The daisies or marguerites of the outer border had central bosses consisting of convex disks of rock crystal, set probably on a blue paste background. Within this border round the central and lower part of the board was a second band of plaster coated with blue paste or *kyanos*, some

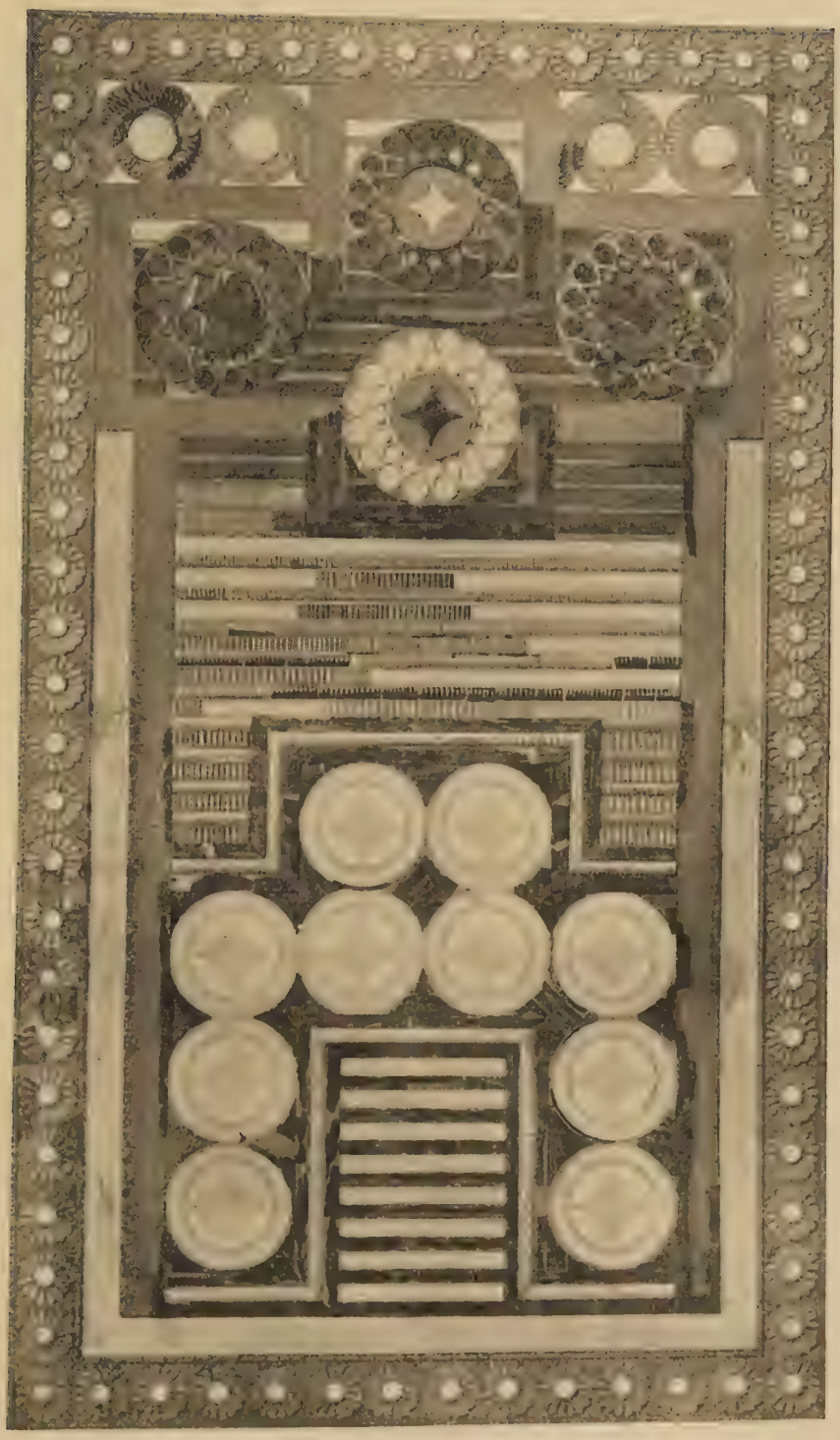


Fig. 25.—The Royal Gaming Board.

sections of which were preserved in position. There can be little doubt that these had been covered with crystal plaques that had been removed.

Beginning now at the top of the board, the angles of the beautiful nautilus reliefs were set round with crystal plaques, one of which was found with traces of its original *kyanos* backing. Like the marguerites the nautiluses had also been adorned with a central boss of crystal. There next follows a very beautiful group of four large medallions inserted among crystal bars backed with silver plates. The curving cloisons of these medallions are formed of ribbed ivory to the surface of which the original coating of thin gold plate was still partly adhering. The sockets thus formed are set with petal-shaped plaques of crystal, the outer row entirely lined with silver plates, the inner with blue eyes of *kyanos* inserted in the silver. The inner circle of these medallions encloses a design—borrowed from contemporary Egypt—composed of *vesicae piscis* of ivory surrounding a central plate of silver-lined crystal with incurved sides. Then follow eleven alternating bars of ribbed crystal and ivory. The crystal bars, which are flat, are backed with silver, the ivory are bossed and are set and partly covered with thin gold plate which originally adorned their whole surface. Eight shorter bars of crystal but with a *kyanos* lining fill the spaces on either side of the topmost section of the lower division of the board.

The principal feature of this lower division of the board is a two-winged compartment, the flat ivory plaques of which enclose ten circular openings. The medallions originally held by these had been broken out, though here and there traces of their original plaster backing were visible. In the centre of one, however, the uppermost on the left wing, were remains of silver oxide, which suggested the former existence of a plate with incurved sides like those forming the centre of the upper medallions. It is possible that the *vesicae piscis* round this were of *kyanos*. The central parts of these medallions, the design of which, except for the blue compartments, would thus have resembled those above, seem to have been covered with crystal disks, though a fragment only of one of these is preserved. It looks as if the disappearance of these medallions was due to the desire of some plunderer at the time of the great catastrophe of the Palace to secure these crystal disks. The ivory plaques enclosing the lower medallions are bordered above and below by bossed and ribbed crystal bars overlaid

on *kyanos*. The remaining space of the lower division of the board is filled with alternating flat bars of ivory, once gold-plated, and of crystal backed with the same blue vitreous paste.

The medallions of the lower division of the board give a key to its purpose, and clearly indicate that we have here the table of some kind of game. A certain analogy is suggested by Egyptian draught-boards and by the variant type of the same presented by the Mycenaean board of beautifully carved ivory found in a tomb at Enkomi or Old Salamis.[1] In the "Lapidary's Workshop" and elsewhere on the site several objects of steatite, bone, and other materials were found, which seem to represent pieces of games, but unfortunately none occurred in juxtaposition with the board itself. Considering the comparative fewness of the circles on which to move the pieces it seems possible that dice also formed a feature of the game, but further discussion of its character must be reserved for a future occasion.

In its original condition, with its ivory bands and reliefs still plated with gold, and its crystal plaques and bosses intensifying the glint and glow of the silver foil and cerulean paste beneath them, this gaming board must have been of truly royal magnificence. The intarsia work, moreover, here found in position and applied to the scheme of a game throws a new light on more fragmentary remains of the same kind found in the Palace of Knossos itself and in the royal tombs of Mycenae. Crystal plaques of similar forms to those of the table were found on the Throne Room floor associated with roundels of enamelled terracotta, the design of which recalls the central pattern of the medallions of the gaming table.[2] In my former Report[3] the close resemblance of these to objects in similar materials found in the Fourth Shaft Grave at Mycenae was already noticed. There can be little doubt, in the presence of this new evidence, that these belonged to boards of the same kind, and that a gaming table was such an indispensable possession of Mycenaean kings that it followed them to another world. This close resemblance between these Knossian relics and those from the Fourth Akropolis tombs at Mycenae is also,

[1] A. S. Murray, *Excavations in Cyprus*, p. 12, Fig. 19, and cf. *J.H.S.* xvi. (1896) p. 288, *seqq.* where Professor Ridgeway ingeniously compares the Greek game of *Polis*.

[2] There were too many of these roundels for them to have been all for the board on which the game was played, but a certain number may in this case have formed part of the ornament of the sides of the box below.

[3] See the supplementary note on the fly leaf at the beginning of the Report for 1900.

as already noted,[1] an interesting indication that the destruction of the Palace was approximately contemporary with this interment.

§ 26.—THE ROOM OF THE OLIVE PRESS.

The Corridor of the Gaming Table leads to a spacious room about 9 metres in length by 7 broad, the cement floor of which on its western side was about 1·40 below the surface. This room contained what appeared to be two press-beds of unequal sizes with runnels leading from them. The smaller of these was drained by a tile channel, the larger by an elongated grooved slab of limestone. The larger press-bed itself was a square limestone slab (1·10 × 1·20 metres) with a square shallow basin opening on the runnel, the groove of which was 43 centimetres wide and 10 deep. This stone channel leads through a door opening into the small area to the north of the chamber where, at a distance of 4·70 metres from the press-bed, it debouches on the remains of an elongated vat, originally lined with terra-cotta.

To one having a personal acquaintance with the remains of the great Roman oil fabrics of the Tripolitan district of North Africa,[2] of which stone press-beds and runnels accompanied by vats are a constantly recurring feature, there seemed to be little doubt that we had here to do with a Mycenaean press of the same kind. It is true that in the case of the African presses and others observed by Messrs. Paton and Myres[3] in Caria and the Greek islands, the stone bed itself is simply grooved while here the whole central part is slightly sunk. But the difference has little practical importance, since a small detached slab with a free space left round it, answering to the groove in the other type as an outlet for the juice would equally serve the purpose in view. This simpler type as represented by the Knossian example is in fact also known elsewhere. An ovoid example was found by Mr. J. L. Myres and myself at Astrítza[4] a Cretan hill site a few hours to the south-east of Knossos,

[1] *Loc. cit.*

[2] I visited these in 1895 in company with Mr. J. L. Myres who, for the first time, explained the true meaning of the so-called "Megalithic Monuments" of Tripoli in Proc. Soc. Ant. 1898, p. 280 *seqq.* For the North African oil-presses cf. too Tissot, *Afrique Romaine*, i. p. 294. The presses may well represent a still earlier Libyan tradition.

[3] *On some Karian and Hellenic Oil-Presses, J.H.S.* xviii. (1898), p. 209, *seqq.*

[4] *J.H.S. loc. cit.* p. 214, Fig. 6.

and a round Greek press-bed of the same type, with a sixth century inscription, was found by Mr. Cecil Smith at Klimatovouni in Melos.[1]

In order to supply a fulcrum for the end of the wooden beam by means of which the bags of olives set above the stone bed were pressed, it was necessary to obtain a powerful support, and this may have been supplied by insertion into the west wall of the Chamber.[2]

Although grapes are pressed by an analogous method in large crates or baskets in parts of Greece the great volume of juice would have required a larger bed than those before us. It seems more reasonable therefore to see in these the remains of olive presses. It is evident from the numerous lamps found in the building as well as in the houses outside, that oil formed an important commodity in Mycenaean Knossos. The signs of conflagration about the upper vats in the Fourth Magazine, have been already noted as indicating a considerable storage of oil, which probably formed the contents of a large number of the pithoi discovered. The discovery recorded by Tsountas of a jar full of olive stones at Tiryns, and more isolated finds of the same at Mycenae itself had already made it certain that the culture of the olive was known on the mainland of Mycenaean Greece.[3] That it was known at the same or even an earlier period in Crete is now made certain by a similar discovery of a store of olive stones in the Palace of Phaestos by the Italian explorers. At Knossos we find olive sprays appearing as a motive of decoration both for frescoes and vase paintings, and apparently also on the pictographic tablets in a commercial relation. Hehn's idea that the oil of Homeric Greece was exclusively an importation from the East has now no longer any probability in its favour.[4]

[1] *Loc. cit.* p. 215, Fig. 7.

[2] Compare the arrangement of a press near Latmos.—*J.H.S.* xviii. p. 212.

[3] Tsountas, Ἐφ. Ἀρχ. 1891, p. 15.

[4] It would even appear that already in Mycenaean times the olive was cultivated in Sicily. In the Necropolis of Cozzo Pantano near Syracuse, the tombs of which contain so many imported Mycenaean objects, in addition to shallow high pedestalled vessels which seem to be a simple adaptation of the Mycenaean and Minoan lamps as seen at Knossos, was found a clay vessel of native fabric, the decoration of which was supplied by the impress of actual olive leaves. (Orsi, "Necropoli Sicula presso Siracusa," *Mon. Antichi*, ii. 1893, p. 21, and Tav. 11, i. 1*a*.)

§ 27.—THE CORRIDOR OF THE BAYS AND ITS VASE DEPOSITS.

West of the recess in which the oil-vat is situated opens a small area which, as the remains of wall-foundations show, has not been preserved in its original condition. One of perhaps a pair of doorways is still in place opening from the end of the Corridor of the Gaming Board on this side. Opposite this, immediately under the east border of the Central Court, is a small chamber with fine gypsum paving and two side walls of massive limestone blocks. These walls form part of a series of buttress-like projections running along this line, and their massive construction was no doubt expressly designed to support the, in part, artificial terrace of the Central Court on this side. Both this and a small chamber adjoining it on the north, showed the remains of a back wall, the original line of which could only be made out by the limit of the pavement in that direction. On the other hand these rooms, like the bays that succeed them on the same terrace flank to the south, were filled with a confused mass of tumbled blocks largely due to the falling in of their back walls. This phenomenon explains the need of the buttress-like structures along the line.

To the south of the above-mentioned small chamber and the adjoining bay on that side, are two doorways, one leading to an elongated well-paved room, the other to a somewhat narrow corridor—1·42 metres in width—leading south beneath the terrace of the Central Court. Four buttress-like piers such as those described, jut out on the western side of the gangway leaving three square recesses.[1] From these it has been found convenient to call this passage "the Corridor of the Bays."

The buttress piers vary in thickness from 1·42 to 1·54 metres, and jut out 2·70 metres; the southernmost, however, has been made 35 centimetres too short, and the deficiency in the masonry was made up by means of woodwork and plaster. There is, as will be seen, a great probability that these massive blocks of masonry not only served to prop up the terrace wall, but also originally acted as the supports of the pillars of a great Megaron above.

The corridor descends by two steps at the third pier, and a third at the fourth, where it opens on the end of the upper Corridor running

[1] These were roughly square but varied a little in dimensions. The first bay north was 2·70 by 2·80 metres, the second 2·70 by 2·85 while the width of the third was only 2·40.

from east to west, and at the same time on the middle landing of the main staircase to be described below.

The bays themselves had been partly used as storerooms, and on the floor of the first was found a large heap of plain pottery. Another deposit of similar vessels was also found in a kind of *loculus* or niche, in the wall opposite the third bay. This pottery was all of a "rustic" class, unpainted, and exhibited some local Cretan forms of a remarkable character. Among these were double pots set at the two ends of a flat base, their upper rims being connected again above. They are provided with perforated conical lids (see Fig. 26), and seem to be the forerunners

FIG. 26.—TWIN VASE AND OTHER VESSELS: GALLERY OF THE BAYS.

of a Mycenaean type peculiar to Crete. In another direction they present a still more striking parallelism with the twin cups set at the two ends of a similar clay base, but without the upper connexion, found in prehistoric Egyptian tombs.[1] The Libyan relations of Crete give a special interest to the parallel.

There were also single pots of the same form and similar perforated lids with double walls leaving a small circular interspace between the outer circumference of the vessel and a low inner receptacle which sometimes rises less than half-way towards the level of the outer rim of the pot (see Fig. 27). In some cases the upper part of the inner receptacle showed a row of perforations and there was also a boring at its base which went right through

[1] As for instance those of El Mahasna.

both walls of the pot. These perforations, repeated in the lid, make it probable that some material was burnt inside one or other of the cavities of

FIG. 27.—DOUBLE-WALLED POT AND OTHER VESSELS: GALLERY OF THE BAYS.

the pot, though whether the vessel was used for incense or, with charcoal, for some culinary purpose is not so clear.

FIG. 28.—KNOBBED VASES: GALLERY OF THE BAYS.

Another interesting class of vessels found in these repositories were vases of somewhat elegant modelling, though still with a plain clay surface,

the distinctive feature of which was their adornment with small knobs (Fig. 28). They had pointed lips, sometimes raised in the early fashion, and a very distinct ring—also a primitive characteristic—round their necks. Knobs are also found, though not so systematically applied, in the earlier painted class of Kamáres ware. As seen on these vases they singularly recall the studs of metal-work, and it is probable that, as in the case of many features discernible in the Kamáres class, they show the influence of metal-work prototypes.

§ 28.—AREA OF THE SPIRAL FRESCO AND HIGH RELIEFS.

Between the east wall of the Room of the Olive Press and the end of the Corridor of the Gaming Board on one side and the southern bay of what is described below as the Eastern Terrace Wall on the other is a somewhat vague elongated space. The upper structures have almost entirely disappeared owing to the denudation of this part of the slope, and only a part of a floor level 70 centimetres below the surface, belonging to the latest Palace period, is traceable along the eastern side of the wall of the Olive Press Room. On this surface, and extending round the outer corner of the Olive Press Room, were ranged large numbers of rustic pots of the same general character as those of the North-East Magazines, the tripod types generally predominating. These lay only just below the surface of the ground.

The lower courses of the southern boundary wall of the area described are also visible, as well as a doorway flanked by massive blocks, opening on to the upper East-West Corridor. That this area, though at present so largely denuded, was once included in an important and brilliantly decorated columnar hall is evident from the remains discovered in two compartments below its original floor-level.

On the more northerly of these, from about 1·70 below the floor-level on which the tripod pots stood, were large masses of fresco exhibiting a grand spiraliform design of blue and black on a white ground, together with considerable fragments of plain red-faced stucco. Several fragments of painted bulls in stucco relief like those found near the Northern Entrance also came to light, including part of a hind leg, two hoofs, the tip of a horn, and the bushes of at least two tails. Near the wall separating this basement from the Olive Press Room, at a somewhat less depth, was found part of a

human limb in the same *gesso duro*, and a similar find accompanied by a fresco fragment was also made on the floor of the Olive Press Room near its northern wall. In the midst of the fresco remains in the basement space described there also lay two parts of column drums of a marbled grey material resembling granite.

The other compartment within this area, containing similar remains, lay under the wall separating it from the upper East-West Corridor. This compartment was not a mere basement space like the other, but lay for the most part beyond the edge of the Eastern Terrace wall, and over a small room belonging to the lower storey and characterised by fine paving slabs and a large pillar base. Above this base, marking the level of the upper floor, was a slab supporting another large block, the upper surface of which was visible above the soil before the excavation.

Here, at a depth of about a metre, were found a series of interesting fragments of painted stucco reliefs. Some of these were of a purely decorative and architectonic character, such as the top of a pilaster, and remains apparently of a ceiling design like that found near the Northern Entrance, consisting of spirals and rosettes. But the most striking objects were parts of human and other subjects in high relief, including portions of what seems to be the forepart of a Sphinx.

Among the fragments of human figures found were a right shoulder and forearm, a right hand, a left forearm holding a pointed vase, and the calf of a left leg. They seem all of them to have belonged to male figures, though the warm flesh colouring has almost entirely faded away. These "*disjecta membra*" were in considerably higher relief than those found on the south front and display an artistic perfection even beyond them. A distinctive feature of these reliefs is the great prominence given to the veins, which is carried out with an exaggerated realism that in places gives the surface of the limbs a varicose appearance. In the case of a right calf the sinuous lines of the veins seem to be somewhat conventionalised; on the other hand, on the back of a closed hand they are rendered with great fidelity to nature. Of all the fragments found, that representing the forearm of a man grasping the end of a pointed vase is the most remarkable (Fig. 29), the muscular development being rendered with extraordinary power. It will be seen that this represents a subject similar to that of the Cup-bearer fresco, and it is probable that the walls of the hall to which these stucco fragments belonged were covered with processional scenes

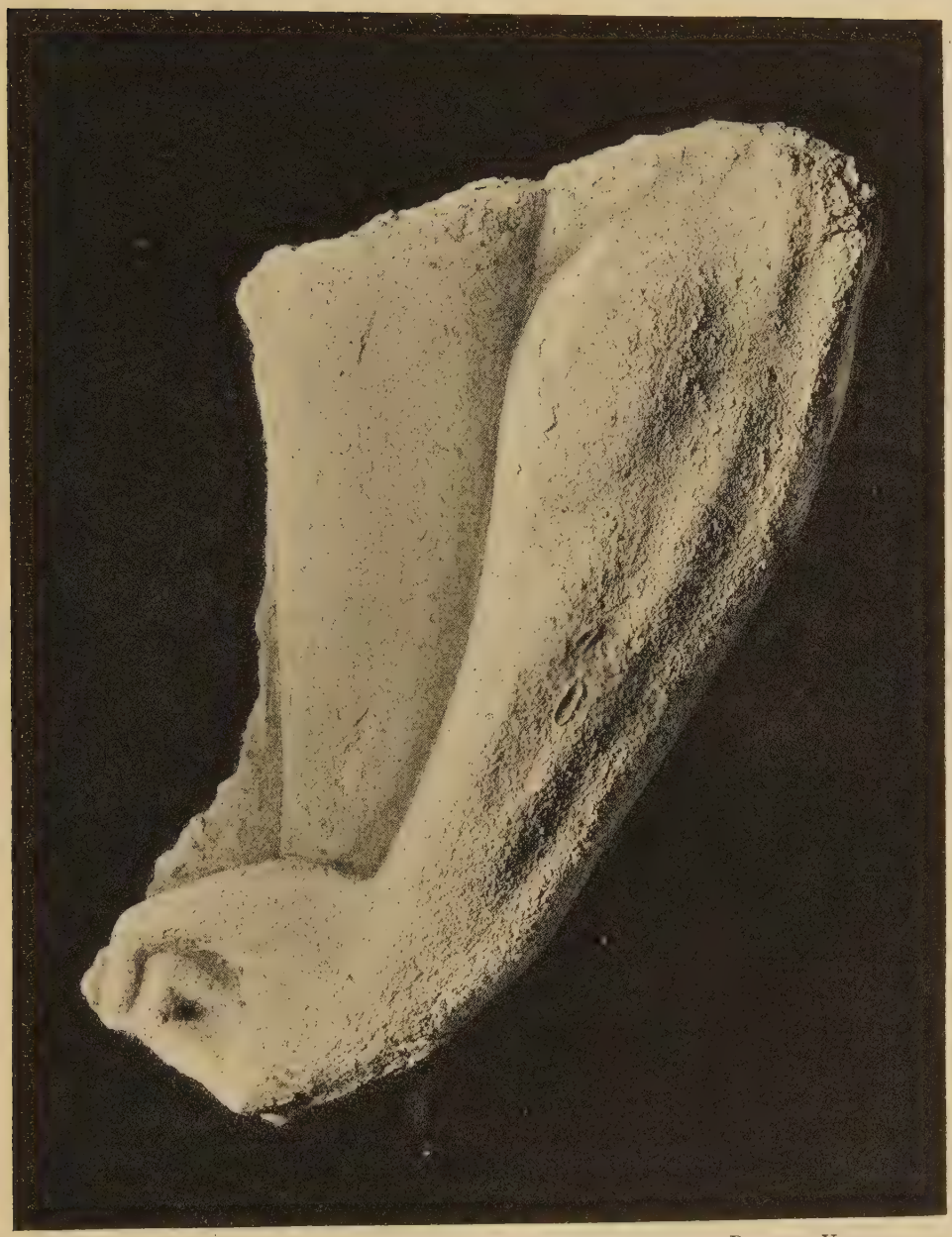


FIG. 29.—HIGH RELIEF IN PAINTED *Gesso Duro*: ARM HOLDING POINTED VASE.

analogous to those of the Western Entrance. But the wall-paintings there discovered can convey only a faint idea of the artistic perfection achieved in these coloured high-reliefs. We seem to note a crescendo scale in the scheme of decoration, which here reaches its acme.

Nor can there be much doubt as to the character of the structure to which these painted reliefs and associated frescoes belonged. The area in which they were discovered forms the east end of a rectangle of which three additional sections are supplied by the Room of the Olive Press, and the long Chamber and Gallery of the Bays beyond it. We have here, in fact, outlined section by section in the walls and piers of the lower storey, the complete plan of a large upper Megaron of the "Minoan" type illustrated by a Hall of the Double-Axes to be described below, and which must have opened to the West on a level with the Central Court. The buttresses of the "Corridor of the Bays" seem to have been, in part at least, designed to support the westernmost pillars of this hall, and in the two marble drums found with the fresco and reliefs we may actually recognise parts of the columns which bordered the "light-well" of the Megaron at its eastern end. It is probable that there stood here the great hall of the Palace, exceeding even that of Phaestos in dimensions.

§ 29.—THE STONE AMPHORAS IN THE SCULPTOR'S WORKSHOP.

Immediately to the north-east of the spot where the painted high reliefs were found was a small upper chamber with a floor level very near the surface. Here, close against the west wall of the room, at a depth of only 25 centimetres, there came to light a large stone amphora lying somewhat on its side (Fig. 30). It was composed of a kind of veined marble-like limestone, used for some other vases found on the site, and, except for the fact that a piece of the neck was broken in and one handle cracked, it was in an absolutely perfect condition, though the part of the side nearest the surface of the ground was somewhat corroded. The vase was 69 centimetres (about 27¼ inches) in height and 2·5 metres (about 6 feet 8¾ inches) in circumference. Its walls increased in thickness from 6 centimetres at the neck to 17 centimetres at the sides, and some idea of its massiveness and weight may be gathered from the fact that eleven men with ropes and poles with difficulty carried it down to the headquarters house below. The flat upper rim was decorated with a spiral band, and a similar band, with

the central coils rising up like rows of snail-shells, ran round the shoulders. The vase had three handles, decorated on their outer side in the same spiral form as the rim, and with their sides cut out into arched hollows, communicating by means of a small perforation. These recesses had evidently been

FIG. 30.—GREAT STONE AMPHORA.

intended for some metallic inlay, which, as there was no trace of oxydisation, was probably gold.

Both for size and magnificence this vase far excels any known stone vessel of the Mycenaean age. Like the chryselephantine gaming board it was truly a royal possession. One feature very noticeable in this vase

is that to see its form and decoration to advantage it must be placed on the ground. In this respect it shows an essential difference from great modern vases or from the marble urns of later Greek tombs, though even smaller types of Mycenaean vessels require the same position. The broad-bottomed gypsum vases with spiral reliefs round their flat rims, found on the floor of the Throne Room, were made to be looked down on in a similar manner.

The style of the spiraliform decoration on this large amphora is identical with that of these alabaster vases found on the floor of the Throne Room, and it must belong to the same approximate date. The latter vases had evidently been set out to be filled, probably with oil from a clay store-jar that was found beside them, laid on its side to facilitate the process, when the operation was apparently broken off by the great catastrophe of the Palace. There was a touch of Herculaneum or Pompeii about the situation in which these vessels were found, which lends a peculiar interest to a similar circumstance connected with the present colossal vase. For although apparently completed it had never been moved from the *atelier* of the artist. Close beside it, on the floor of the same small room which evidently served as a workshop, there stood, in fact, another smaller stone amphora, about 35 centimetres high, of the same general form, but with its salient features only just roughed out of the limestone block. Here, as in the other case, the catastrophe came suddenly—this vase was left unfinished as the others were left unfilled. Both the large amphora and the vases of the Throne Room evidence in their style the most perfect development of Mycenaean decorative art. From the correspondence of the crystal, ivory and porcelain remains, in the latter case scattered beside the vases, with those of the Fourth Shaft Grave at Mycenae, we know that that artistic bloom was cut short here about the time when the unknown King of the mainland city was laid to his rest.

The discovery of a sculptor's workroom in which highly artistic stone vases were actually in the course of execution, is only one of many indications that companies of skilled craftsmen and artists lived and worked within the Palace walls. The fresco paintings were naturally executed on the spot, and more than one deposit of colours shows that the materials were also kept in the building. The Lapidary's Workshop on the Southern Terrace shows that many small objects of stone and bone were manufactured on the site, and the finding of one or two unfinished

lentoid beads of steatite makes it probable that the art of gem engraving was also practised on the spot. The amount of clay documents shows that scribes must have been largely employed, and instruction in the art of writing was doubtless also given in the Palace chambers. One, to be presently described below, is in fact arranged like a school-room. Children were taught within the walls, and apprentices instructed in the arts and mysteries of their craft. The abundance of "rustic" pottery has already been referred to as an indication that colonies of slaves or artisans of humble condition were domiciled inside the building. The Palace of Knossos, like the great Indian Palaces at the present day, was a town in itself.

§ 30.—THE EASTERN TERRACE WALL.

North of the area containing the spiral fresco and high reliefs, near an angle of the Eastern Terrace Wall, two more column drums of dark steatite were found, about 30 centimetres below the upper floor-level. Here, too, about 4 metres down, was a large deposit of vases belonging to the earliest Palace period. They represent the transition from the pure Kamáres style, some of them showing brown decoration on a pale buff ground, while others present the white and powdery red bands on a dark ground which characterise the indigenous early metal age pottery of Crete. Near here are the remains of a well only partially excavated.

North of this point is a well-preserved section of what has already been described as the Eastern Terrace Wall, running north and south. It is composed almost exclusively of good limestone blocks,[1] and its only facing is on the eastern side, showing that it fulfilled the functions of a terrace wall. The walling begins about half a metre below the surface of the ground, and goes down to a projecting base or plinth about 30 centimetres high. The upper part of the wall preserved is not continuous, being broken by embrasures. Along the northernmost part where the upper structure has vanished, stone runnels or gutters are visible at intervals, crossing the upper surface of the base of the wall. It is probable that these gutters ran out originally between embrasures.

[1] A few gypsum blocks are to be found among them.

§ 31.—THE FRESCO OF THE FEMALE *TOREADORS* AND THE BOXER RELIEF.

South of the angle of the Eastern Terrace Wall, within which lay the deposit of early pottery, a solid piece of walling is preserved, consisting of five courses of well-cut limestone blocks, one of which, belonging to the fourth layer from the bottom, shows a square projecting gargoyle, devised, like later stone spouts of the kind, to protect the wall from the drip of a gutter. At this point a later Mycenaean chamber with rubble walls has been built up against the finer structure of the Terrace. It seems probable from the remarkable contents of this room that it was the basement of a more important chamber which once rose above the level of the Terrace Wall. A large number of fragments of good Mycenaean vases, including fine naturalistic designs of plants and marine objects, were found in this space from a considerable height above the floor level,[1] showing that they had belonged to an upper chamber. With them were abundant remains of wall paintings, some of a decorative character, including fine rosette ornaments, but the greater part belonging to a large composition exhibiting bull-grappling scenes.

Although the painted stucco was much broken up it was possible to put together parts of two galloping bulls, about a quarter (linear) of the natural size, and executed with extraordinary spirit. These noble animals are drawn to a relatively much larger scale than the human subjects with which they are associated, a feature also observable in some designs of the same *taurokathapsia* on Mycenaean gems. Over the back of one of these bulls a Mycenaean cow-boy is seen turning a somersault in most acrobatic guise.

But the most interesting feature in this wall painting is the appearance, beside the male performers in this dangerous sport, of female *toreadors*, distinguished by their white skin, the more varied hues of their costume, the blue and red diadems round their brows, and their somewhat curlier *coiffures*, but otherwise attired in precisely the same way as the "cow-boys," with a loin-cloth and very narrow metallic girdle and striped socks and slippers. One of these Mycenaean "cow-girls" is seen between the horns of a charging bull, which the acrobatic male figure has

[1] About 1·70 metres down, or about 1·50 metres above the floor level.

apparently failed to seize hold of. The horns, however, pass under her armpits, and she grasps them higher up with her hands.

The episode is sensational in the highest degree, but we have here nothing of the mere catching of bulls, wild or otherwise, as seen on the Vaphio Cups. The graceful forms and elegant attire of these female performers would be quite out of place in rock-set glens or woodland glades. They belong to

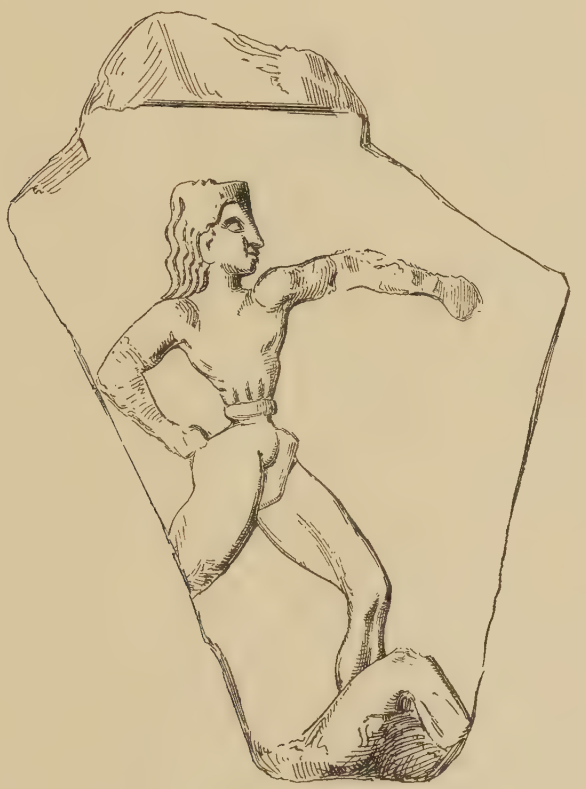


FIG. 31.—RELIEF ON PART OF STEATITE PYXIS, SHOWING BOXER (⅔).

the arena, and afford the clearest evidence that the lords of Mycenaean Knossos glutted their eyes with shows in which maidens as well as youths were trained to grapple with what was then regarded as the king of animals. The sports of the amphitheatre, which have never lost their hold on the Mediterranean world, may thus in Crete at least be traced back to prehistoric times. It may well be that, long before the days when enslaved

barbarians were "butchered to make a Roman holiday," captives, perhaps of gentle blood, shared the same fate within sight of the "House of Minos," and that the legends of Athenian prisoners devoured by the Minotaur preserve a real tradition of these cruel sports.

In the same chamber with these painted stucco fragments was also found part of a dark steatite pyxis—analogous to one found on the site of Knossos in 1894—with a relief showing an athletic contest of another kind (Fig. 31). It is apparently a part of a boxing match. A youth with clenched fists stands with his left arm extended as if in the act of warding off a blow, while his right arm is either drawn back to give greater force to a blow or momentarily rests on his hips.[1] The latter interpretation of the gesture is permissible, if in the bent knee of a prostrate figure before the pugilist we may recognise an adversary whom he has just knocked down. The figure has somewhat suffered, and is contracted by the usual metal band into a disproportionately small waist, but the limbs, notably the left leg, show beautiful modelling, in this case free from muscular exaggeration.

§ 32.—THE "SCHOOL-ROOM" AND ADJOINING CHAMBERS.

Immediately beyond the rubble construction which forms the south wall of the room containing the bull frescoes are what appear to be the lower courses of an older wall of solid masonry, running at right angles from the Eastern Terrace Wall. It is possible that this marks part of the course of an original outer wall, enclosing a small quarter of the Palace that lay between it and the inner wall which here represents the continuation of the Eastern Terrace line.

Several small rooms are enclosed within this area, the most interesting being that which occupies its north-west corner. Along the south wall of this room ran a low stone bench, at the west end of which stood a square pillar coated with stucco, the upper surface of which was hollowed into a bowl-like cavity. At the other end of the bench was another lower pillar of rough stone, perhaps originally plastered over, with a similar cavity—the one pillar being of a height to be used by a man, the other by a child. Opposite this bench and pillars, against the north wall, was another similar stone bench, and the masonry rising behind it at a somewhat higher level

[1] The attitude closely resbemles that of the boxers—there armed with *halteres*—on the bronze situlas of Waatsch and Matrai.

NORTHERN BORDER OF PALACE OF KNOSSOS, WEST OF NORTHERN ENTRANCE WAY.

[*Face p.* 96.

gave the appearance of a second. This, however, according to the explanation adopted above, should probably be regarded as part of an early outer wall of solid masonry. There seemed moreover to be remains of a doorway through this in the north-east corner of the room.

Along the side walls of the room are two more stone benches, which have a distinct inward slope as they recede from the south wall, an arrangement which inevitably recalls that of a modern class-room. The name of "School-Room" has therefore been provisionally given to this chamber as a distinctive title. May we, perhaps, imagine that the higher and lower stucco bowls were used, by master and pupils respectively, for keeping moist the clay lumps, out of which were moulded the tablets that serve as a vehicle for the linear script, and that the art of writing was here imparted to the Palace youth? That no written documents here came to light does not greatly weigh against this possibility, since hardly any minor relics were found within the walls of this room. Near the floor level, at the north-east corner, however, a very beautiful ornament of *kyanos* or blue glass paste was unearthed, in the shape of a Mycenaean shield with engraved scrolls on its outer surface. It showed a perforated handle on its under side. The floor, of gypsum cement, lay at a depth of from three to two metres below the surface, according to the slope.

At the south-west corner of the room were the jambs of a doorway leading to an elongated chamber which seems to have been used as a store-room. At the end and along the side walls were a number of "rustic" vases of the usual character, some piled on one another. Among these was an amphora of pyriform shape, with an oval mouth resembling in form that from the Kasella given in Fig. 14,[1] but with a plain unpainted surface, tripods and two-handled jars, shallow bowls, and cups with very high looped handles, these latter of a light paste. On a paved floor level, immediately east of the "School-Room," four jars, similar in form to some of those in the inner Magazine, stood in a row, and two of these were distinguished by showing a white band on a reddish ground, another was of the same ground colour, without the band, and the fourth of plain clay. Over one was also a plain clay bowl of fine paste, like those in the neighbouring store-room. We see here represented more than one stage in the transition from the pure "Kamáres" to the "rustic" indigenous style of the Palace, which survived in it to the great days of Mycenae. In this case a piece of

[1] See p. 47 above.

Mycenaean painted pottery of good period lay in the earth deposit a little above the jars.

Bordering the "School-Room" on the West was a small room representing the lower storey of that with the stone amphoras. It opened into a longer chamber from which a kind of vestibule led to what may perhaps be described as a small hall, presenting some interesting constructive features. In the walls were visible at intervals square upright grooves, which had formed the sockets of thick upright posts, the carbonised remains of which were visible within them in considerable masses. Upon the well-paved floor was a large deposit of lime, perhaps due to the calcination of gypsum slabs in the upper storey, under the great heat of the conflagration.

At the west end of this chamber, which may be called "The Room of the Wooden Posts," was a doorway 1·50 metres wide, flanked by a large stone pillar, or rather base, immediately under the great block of the upper floor level near which the relief frescoes were found, and which, from the fact that the upper surface slightly protruded above the surface of the earth, had always been somewhat of a landmark in this part of the site. This upper block rests on a flat slab which here represented the upper floor level 3·10 metres above the pavement below. Between these upper blocks and the base a strong supporting member must originally have intervened, perhaps in the shape of a square wooden pillar. The remarkable feature of the case is that the upper blocks had remained in place, owing to the accumulation of débris below, though the supporting pillar had itself decayed. We shall find many striking parallels to this phenomenon in the large halls beyond.

Between the base and original pillar that flanked the doorway below, and the north wall of the Room of the Wooden Posts, was a well-built balustrade, leaving an open space above it. This open space faced the doorway on the opposite eastern side of the room, and was no doubt devised to give light to the small finely-paved lobby to which the doorway beside the pillar gave access. This lobby formed the means of approach to another doorway at its southern end—its jamb and threshold exceptionally well preserved—leading into the Lower East-West Corridor, to be described below, and thus affording access to the great eastern halls of the Palace.

§ 33.—THE EAST-WEST CORRIDOR.

Adjoining the western border of the region described in the preceding section and on the same ground-floor level, is the opening of a passage-way, about 1·80 metres wide, running almost due east and west. About six metres from the point where the walls of this corridor are first visible, the passage-way mounts by means of a flight of stone steps. Ten of these are preserved in an unbroken series, after which there is a small gap succeeded by three more steps, the first, however, broken. The original flight consisted of fifteen steps, of which two and a portion of a third are now wanting. The cause of this break is due to the fact that whereas up to the tenth the steps rest on a solid foundation, at this point they reach the beginning of the lower East-West Corridor already referred to, into which the door from the lobby with the balustrade here opens. The roof of this end of the lower Corridor had collapsed, destroying the steps above it at this point.

Beyond this point, however, the floor of the upper Corridor has remained intact for some distance, running, as was afterwards made clear, above the lower gangway, the floor of which is about 4 metres below it.

Beyond the flight of steps the upper passage, to which the name of "East-West Corridor" *par excellence* may be given, passes on the right the doorway flanked by two massive blocks, already noticed as the southern entrance of the area containing the high reliefs and spiral fresco. Continuing east it slightly narrows into what appears to be a door opening, and follows the balustrade of the "Hall of the Colonnades," to be described below, to the important crossing point where the upper and lower staircase of this Hall and the Corridor of the Bays meet on a common landing.

The total length of the East-West Corridor is thus about 40 metres, representing the width of this section of the Palace, and it is a noteworthy fact that this distance almost exactly corresponds with that of the opposite quarter of the Palace as taken from the entrance of the Room of the Column Bases to the borders of the Western Court. This correspondence in the width of the two opposite sections of the Palace at this point gains significance from the fact that the East-West Corridor exactly centres on the line of the Pillar Rooms and their lateral passage on the other side, which with their ante-chamber, the Room of the Column Bases, forms a kind of central division to that wing of the Palace. The East-West

Corridor, in the same way, exactly divides the line of buildings on the eastern side of the Central Court, so that the two lines between them form a kind of *Decumanus* to the building. The *Cardo*, to continue the Roman simile, is supplied by the Northern Entrance-way at that end of the Central Court, and by the traces at the opposite end of the Court of a Southern Entrance passage.[1] Here, too, the principal or "Praetorian" front was to the East.

The whole result of the most recent excavations has been more and more to bring out the fact that, vast as is the area it embraces, the Palace of Knossos was originally devised on a single comprehensive plan. The ground scheme of a square building, with a central court approached at right angles by four main avenues, dividing the surrounding buildings into four quarters, is a simple conception which, as we now know, long before the days of the later Roman *Castra*, was carried out in the *Terremare* of Northern Italy. It was not otherwise that at a much later date Hippodamos laid out the plan of Thurii, and Frederic "Stupor Mundi" and our first Edward resorted to similar schemes for their civic foundations from Terranova to Winchelsea. But while these other plans dealt with separate units, in their aggregate composing a township, and easy of distribution, the Minoan architect may claim the credit of adapting the same root idea to an organic whole, and fitting it in to a complicated arrangement of halls, chambers, galleries, and magazines, forming parts of a single building.

§ 34.—Extensive Deposits of Inscribed Tablets and Seal Impressions in the East-West Corridor.

The whole upper course of the East-West Corridor, from the top of the steps onwards, was the scene of repeated finds of inscribed clay tablets and seal impressions. Others, again, were found within the doorway leading to the area of the High Reliefs and the Spiral Fresco, and others, again, had found their way over the edge of the neighbouring Hall of the Colonnades, into the corridor below, and even to the lower recesses of the adjoining staircase. It was obvious, however, from the character of the inscriptions and recurring *formulae*, as well as from the continuous though extended area of their diffusion, that they belonged to the same deposit, or, more

[1] See above p. 14. In the plan, which only shows here the basement spaces, an idea of the Southern Entrance Passage can hardly be given.

probably, series of deposits. The scattering that had occurred seemed in this, as in some other cases, to be due to their having reached the position in which they were found from an upper floor. These tablets had suffered in an exceptional degree from the effects of fire, and in some cases had been reduced to a condition resembling blackened pumicestone. The meaning of this, however, became clear when it was found that they originally lay in what seems to have been a third storey, contiguous to the great Palace Halls, where the final conflagration has left other signs of having been more violent than elsewhere. The tablets do not present any pictorial figures. They relate to accounts of one kind or another, on the whole to higher amounts than those of any other deposit yet brought to light—the figures in one case being over 19,000. The total sums at the end of the inscriptions are often preceded by the throne-sign.

The seal-impressions were most numerous on the staircase landing at the west end of the corridor. They show examples of the finest Mycenaean style of engraving, impressions from the same intaglio being often repeated. The subjects include,—besides the usual bulls, lions, *agrimis*, rams, moufflons, dogs seizing their quarry, flying birds and flying fish—a certain number of specially interesting types. It was here that several impressions were found from the actual signet ring delineating the seated Goddess and her attendants, the counterfeit matrix of which has been already described.[1] Two designs belonged to the same religious cycle as that showing the Goddess on her sacred peak with the lion supporters. On one of these, a flounced female figure, evidently the same divinity, lays her hands on the necks of two lions who stand back to back with their heads turned towards her. Two other varieties show a male figure between a pair of confronted lions, stretching his arms over their heads in an attitude similar to the design on a gem found near the site of Kydonia.[2] In another impression a lion stands before a probably "baetylic" column, and a very fine seal shows a moufflon standing before a fluted column with a Mycenaean shield in the field. A sacred tree of papyrus-like appearance rises between two symmetrically grouped wild goats, and an ox is seen laid out on a sacrificial table, as on a gem from a tomb of the Lower Town of Mycenae.[3] Griffins occurred both single and confronted. Two scenes refer to the *Tauroka-*

[1] See above p. 19.

[2] *J.H.S.* 1900, p. 163, Fig. 43.

[3] Ἐφ. Ἀρχ. 1888, Pl. x. 36. Placed wrong way up on the plate. Compare the gem in the Berlin collection, Furtwängler, *Beschreibung*, &c. No. 22.

thapsia—in the first a man, who has apparently missed his grasp, is seen above a magnificent galloping bull, in the second he lies prostrate below the lower outline of another. A curious device consists of a Mycenaean shield in an upper compartment, while below is the upper part of a naturalistic design of a Triton shell. A very exceptional type, of which several examples came to light, also showed the field divided into two compartments, in the upper and lower of which are four crouching figures, apparently of men with their forearms slightly bent upwards. This device derives a special interest from the fact that seal impressions, with a type so similar that it is difficult to say whether or not they were taken from the same gem, were found by Mr. Hogarth amongst the hoard of clay sealings brought to light on the ancient site explored by him at Zakro in the extreme east of Crete—a fact which indicates a direct connexion between that early settlement and Knossos.

§ 35.—THE QUADRUPLE STAIRCASE.

The meeting-point of the East-West Corridor and that of the Bays had been originally reached by excavation from the north along the latter line, and the adjoining landing, on which so many seal impressions were found, had been naturally regarded at first as a small bay of the same Corridor. A rubble block of masonry beyond had been taken for a broader buttress of the same kind as the others that jut out along the terrace line of the Central Court, and a fifth bay seemed to have been reached beyond it.

It was at this point that the development of the excavation took an altogether dramatic turn. Hitherto, along the line of approach—in the area, that is, between the Eastern Terrace line and that of the Central Court—the ground-floor of the rooms and galleries had lain according to the slope from at most $2\frac{1}{2}$ metres to half a metre below the surface of the ground. But, as the excavation of what had been taken to be a fifth bay of the Corridor proceeded, the earth deposit was found to go down and down till a paved floor level was reached 5 metres below the surface, while a little to the east of this another cement floor was subsequently found lying 6·80 metres down, or about 8 metres below the level of the pavement of the Central Court. Steps going up and down began to appear, and it soon became clear that what had been taken to be a fourth bay of the

Corridor was the middle landing of a quadruple flight of stone stairs, while the supposed fifth bay was the landing below. The Corridor of the Bays, itself on a ground level, was seen to have emerged on the galleries and stairs of an upper storey, while the walls bounding the East-West Corridor on the north were found to represent a line along which the whole transverse section of the hill had here been cut out to a lower ground level corresponding with that beneath the Eastern Terrace. The base of the terrace wall of the Central Court, which had run from 2 to 2½ metres below the surface, now went down nearly to 7,[1] originally 8, metres, or over 25 feet.

The western section of the East-West Corridor proved to be at the same time the upper gallery of a square columnar hall, and was flanked on the side overlooking the hall by a balustrade, a coping slab of which showed the raised socket of an original wooden column. The point where the East-West Corridor and that of the Bays converge formed, as already noticed, at the same time part of the middle landing of a staircase. From this point a flight of stone steps led up along the west line of the above mentioned hall, flanked by a similar balustrade rising in three steps, each gradation terminating in a socketed slab[2] for a wooden column.

At the upper termination of this flight of stairs part of a large stone slab representing another landing was still in position. The middle wall between the inner and outer staircases showed a window opening to give light to the lower flight. This wall was of rubble construction, but at its upper end by the landing was a huge limestone block, the surface of which, facing the upper landing and round the corner beyond, was cut out in such a way as to leave a graduated projection. The ends of three steps were outlined over this projection, attesting the former existence of a higher flight of stairs ascending to the level of the Central Court over what afterwards proved to be the second flight from the bottom. We have here the remains of three distinct storeys, above which was probably a fourth.

Descending the stairs to the landing above which the seal impressions were found and which was much choked by large fallen blocks, another flight of twelve steps was opened out, the west wall of which was built up against the Neolithic clay deposit that forms the base of the Central Court.

[1] On the inner line of the stairs the depth, as stated above, was only 5 metres, but further south the depth was the same as that of the adjoining Hall of the Colonnades, namely 6·80 metres, representing an original depth below the level of the Central Court of about 8 metres.

[2] Their sockets, like that already described, had a raised ring and their inner diameter was about ·58 centimetres.

This flight led to a lower landing divided into two levels, the slab immediately at the bottom of the stairs leading to another at the top of the lowest flight by a triple step.

At this point is a large limestone base, immediately under the block that flanks the upper landing. Above this base, after an interval of 13 centimetres, was a flat slab with a raised socket like those of the balustrade above, made for the insertion of a wooden column which had formed the support of the large block above. The interval between the socket and the upper block was 1·60 in height. It had become filled with a tough red earth which had kept the upper block in position. In the earth immediately under the west side of this block were seen the charred ends of a row of square cross-beams which had intervened between it and the capital of the column.

It was at first thought that a direct access existed from this lowermost landing to the hall on its eastern side. But it was found that the floor of the hall lay at a considerably lower level, and a fourth flight of twelve stairs was gradually brought to light descending north under the second flight, with a headway of about 2·70 metres in height. The excavation of this part was of extraordinary difficulty, owing to the constant danger of bringing down the stairway above. It was altogether miners' work, necessitating a constant succession of wooden arches. Two of our workmen however had worked in the Laurion mines, and after eight days' slow progress, a passage down the steps was finally cleared along the western wall of the staircase. The outer wall was found to end below in another limestone base, with a socketed slab above it for a wooden column, like that of the landing above.

The stairs emerged below on a well-paved portico, with fine gypsum slabs on its inner walls, opening on the hall already referred to, and which, from its tiers of pillars above and below, has received the name of the "Hall of the Colonnades." The quadruple flight of stairs, leading down to this from the Central Court and the corridors of the north-east Palace region, seems originally to have consisted of fifty-two stone steps, of which thirty-eight, and the indications of five more, are preserved. The steps were about 12 centimetres high and 45 deep, those of the under flights 1·80 metres wide, those of the outer about 1·25 metres. The window opening to give light to the third flight from the top has been already noted, and there seems to have been another opening of the same kind on the lowest flight

from the Hall of the Colonnades (see Fig. 32). It is possible that a stepped balustrade with columns also ran up alongside of the uppermost stair. A burnt shaft of a column of cypress wood, which had probably fallen from a neighbouring part of the balustrade, was found in a small chamber just beyond the upper landing. It had the appearance of being fluted, but this may have been due to the effects of the burning.

§ 36.—THE HALL OF THE COLONNADES.

The descending stairs, and the parapets with sockets for wooden columns on the upper margin of the "Hall of the Colonnades," at first gave the impression that we had here to deal with a large bath, like those already discovered. But though, as already pointed out,[1] the analogy to a certain extent holds good, the doorways and circular bases, subsequently found on the floor level, showed that the structure with which the above features were here connected was in fact a Columnar Hall.

The quadruple staircase described above dominated the western side of this Hall, while the portico, into which the lower flight of stairs led, formed the northern section of the Hall itself. This portico acted as the support of the parapeted gallery already mentioned as representing the continuation of the East-West Corridor, and might itself be regarded as the continuation of the passage-way referred to as "the Lower East-West Corridor," running below the other. It led into the lower Corridor proper by a doorway at its eastern end, with exceptionally well preserved wooden posts and lintel. The Portico had a gypsum paving and a dado consisting of thin slabs of the same material along its inner walls. It was filled with a fine earthy deposit into which some inscribed tablets belonging to the same deposit as those of the East-West Corridor had made their way through a breakage of the floor, and several seal impressions derived from the same source were found near the doorway. Two circular bases, about 60 centimetres in diameter, on the outer line of the Portico, showed the position of the wooden columns that had originally supported the stone breast-work—itself about 90 centimetres in height—of the Upper Corridor. The columns must have been about 3·50 metres high, and in spite of the fact of their disappearance, the earthy deposit and débris which had made its way into the intervening space had been sufficient to keep

[1] See above p. 62.

the balustrade above in position. Unfortunately, the wooden framework, which had been first inserted to support this breastwork while the débris

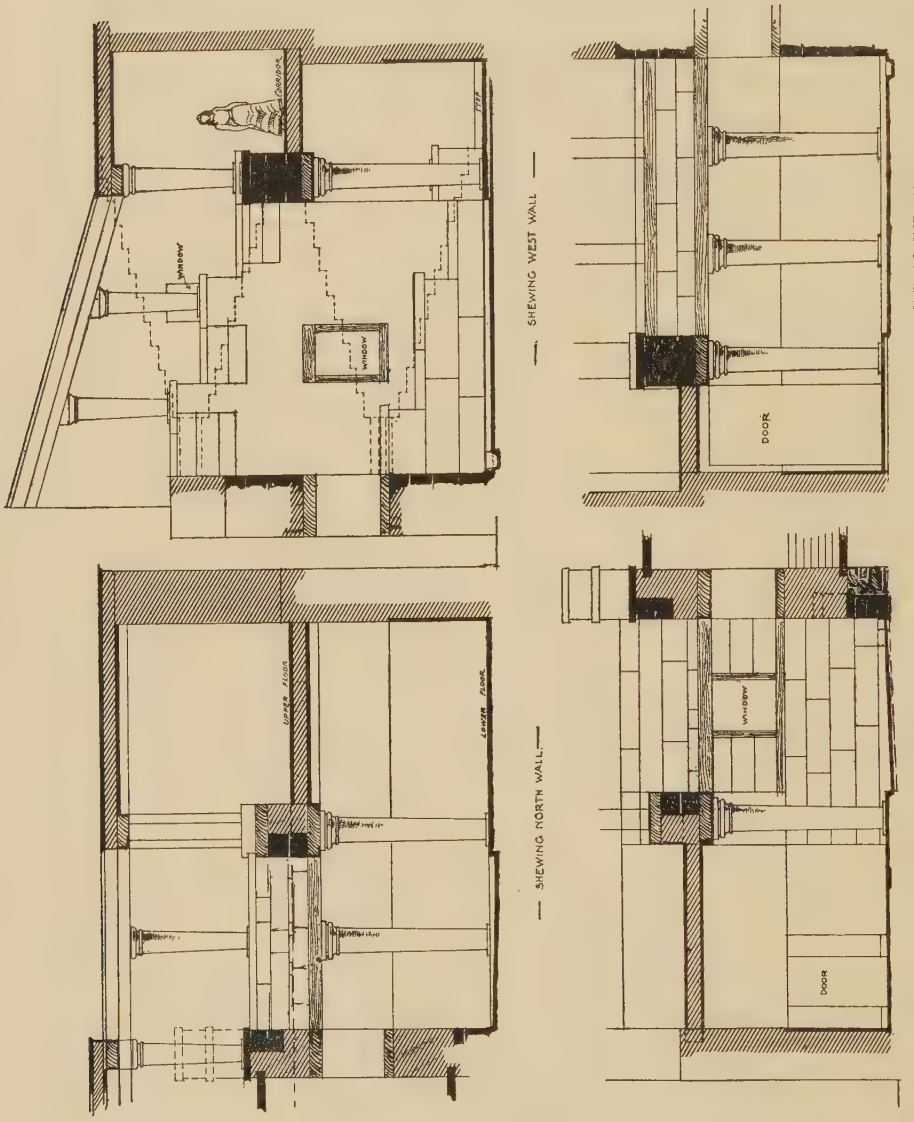


FIG. 32.—THE HALL OF THE COLONNADES: RESTORED SECTIONS.

was being cleared from below it, proved unequal to a sudden lateral strain caused by a slip of exceptionally loose earth, and a large part of it fell during the night of June 11. Owing to the presence of a heap of soft

earth below, however, the blocks did not suffer serious injury, and it was found possible to replace them in position with a stronger support.

The second column base of the portico described above forms at the same time the first of a series of similar bases[1] on a stylobate running across the Hall from north to south and dividing it into two equal spaces. The eastern half of the hall, within the column bases, had a good gypsum pavement and the lower part of the enclosing walls was covered with fine slabs of the same material, as in the case of the "portico." The western half, on the other hand, between the stylobate and the wall enclosing the staircase, had only a cement flooring, and was obviously, in part at least, hypaethral.

The three columns which originally stood on this central line had acted as supports of the front line of an upper chamber above the paved space below, the floor of which must have been on a level with that of the Upper Corridor, on which it undoubtedly opened. Curving slightly down from the borders of the gallery above the lower portico, there were visible a series of the round carbonised ends of the beams that had supported the floor of the upper chamber. Above this again were the remains of a stone breast-work, about the same height as that of the adjoining gallery, in a somewhat ruinous condition, which had doubtless originally supported some kind of wooden pillars, the openings between these affording light to the upper chamber, and at the same time a view from it into the court below. This ruinous parapet had eventually to be removed pending its replacement on a wooden scaffolding.

The comparative height of this part of the building—by the staircase, certainly three storeys—the spacious hall and the numerous wooden columns seem to have greatly intensified the effects of the conflagration. The painted stucco, which must originally have covered a large part of the walls, together with a good deal of the gypsum and limestone materials of the upper part of the building, had been reduced to a calcined mass, which greatly increased the difficulty of excavation in the upper part of the deposit within the "Hall of the Colonnades." From about $4\frac{1}{2}$ metres above the lower floor level, for a thickness of over 3 metres, a calcined stratum of pale red earth almost as hard as rock had to be cut through with the pick, and, though the lowest layer was somewhat softer, large

[1] The diameter of the central column base was 60 centimetres, that to the south 63 centimetres.

heaps of lime lay in the south-east corner of the lower room which had to be literally cut away from the pavement. Above the calcined stratum was a deposit of charred rafters.

In spite of the destructive results of the conflagration, a fortunate circumstance seems to have preserved some record of the decoration of the upper room of the hall. Into a small space immediately to the south of it, which, from its secluded position and exiguous dimensions, must have been comparatively protected from the force of the fire, there had fallen many pieces of painted stucco belonging to the decoration of a larger chamber, which were certainly derived from this area. Pieces of fresco were here found of a fine architectural character, one apparently representing a part of a façade, in which was a frieze with half rosettes of a character similar to that found near the north-west corner of the Palace.[1] Fragments of a bull in painted stucco relief were also found here.

In the same small compartment—little more than a pit in itself—about 4 metres down, together with the fragment of fresco and stucco relief, occurred a curious decorative slab of porphyry-like limestone, the border of which was cut out into a kind of grotesque rockwork outline—suggestive of Japanese or Chinese designs. There was also found here a bronze knife and a deposit of seal impressions, among which eighteen pieces repeated the same seal type containing a pair of the strange Mycenaean daemons.

Whether or not these seals had also originally found a place in the upper chamber of the Hall of the Colonnades, a very remarkable find made about on a level with its stone breastwork, near the southern wall, seems to show that some important documents had been deposited there. This was a clay tablet measuring 267 by 155 millimetres—the largest yet found—and containing twenty-four lines of inscription. The inscription showed the man-sign constantly repeated after groups of linear characters, and perhaps refers to male slaves or captives, giving the names of their owners. It is divided into three lists, prefaced by varying formulas, and with the total numbers of each list added up at the end. With this tablet were found some smaller fragments of inscriptions.

In the south wall of the lower chamber within the colonnade, at the south-east corner, was another well-preserved door way,[2] opening into a

[1] See above p. 53.

[2] Both this and the doorway at the north-east corner were 1·40 metres wide.

passage the connexions of which are not yet ascertained. The adjoining part of the south wall of the chamber, like the other interior walls, here was of rubble masonry lined with gypsum slabs. Outside the line of the stylobate, however, the character of the south wall suddenly changed. From this point onwards, as befitting a more exposed structure, it was formed of limestone blocks of good masonry, interrupted by two horizontal cement-lined grooves, which had been originally filled by wooden beams, and which in part of their length had formed the upper and lower frame-work of a window-like opening. Owing to this insertion of more perishable material the upper part of the wall had somewhat subsided towards its eastern end, though the relative position of the blocks was not affected. Near the south-west corner of the room twelve courses of masonry were preserved, in addition to the interspaces formerly filled by these cross-beams. This south wall attained a height of 5.40 metres, or about 18 feet. Upon a large number of its limestone blocks was cut a sign perhaps representing a kind of *sistrum*.

The adjoining west wall which encloses the staircase is of a more complicated structure. Above, immediately under the balustrade, are good limestone blocks, and below, again, is fine masonry resting on the ground-level, and rising in steps, following those of the breastwork of the staircase above. The intervening space, however, between these two bands of good material is now largely filled with clay and rubble, partly of a derivative nature. It appears that the upper and lower masonry must have been connected by wooden piers, and that there was a window between these giving light to the lowest flight of stairs.

The oblong space in front of this wall, and outside the line of the colonnades, was coated, as already noted, with a cement, largely consisting of pounded gypsum, in place of the stone paving which was laid down in the covered parts of the hall. A further indication that in part at least this outer area was exposed to the weather, is supplied by the fact that the floor slightly slopes towards a drain hole in the south-west corner. The upper course of this drain[1] could be traced through an adjoining chamber for some metres to the south, while eastwards its course can be followed along the whole southern wall of the Hall of the Colonnades, and across the neighbouring angle of the Hall of the Double-Axes beyond.

We have here then a Columnar Hall (see Fig. 32), about 8 metres

[1] The drain was 9 centimetres deep and 19 wide.

square, consisting of a covered space,—chamber and portico,—connected with another portico and chamber above them by a triple staircase, and the whole bordering an open space 5·40 metres long by 3·30 broad, which served as a well for lighting both storeys. It is possible that this open space may have been partly covered by a lantern above ; but the drain and sloping floor, and the change of materials for pavement and walls, show that it was largely exposed to the weather. Nothing indeed in this whole structure is more remarkable than the careful adaptation of material to conditions. In the sheltered spaces were good paving, gypsum dados, and painted stucco, (of which fragments only had here been saved from the conflagration), covering inner walls of merely rubble fabric. In the exposed parts cement takes the place of the fine but perishable gypsum slabs for the flooring, and the walls change to well-cut masonry or solid wood-work. The whole structure of this hall, with its tiers of colonnades rising one above the other, and, on the west side, following in harmonious gradations the ascent of the double flight of stairs, must in some respects have anticipated the effect of the entrance court of an Italian Renaissance Palace.

§ 37.—THE MEGARON OF THE DOUBLE-AXES.

To those descending east by the quadruple staircase, either from the Central Court or from the quarter of the Palace with which the Corridor of the Bays communicates, the Hall of the Colonnades would have formed a kind of fore-hall to a larger Megaron lying immediately to the east of it.

The communication between the two halls, however, was not direct, but by means of a short section of the lower East-West Corridor entered as already described through a well-preserved doorway in the north-east corner of the Hall of the Colonnades. About four and a half metres beyond this another doorway opens in the right wall of this lower Corridor giving access to the large Megaron that bounds its southern wall.

The excavation of this area to a great extent repeated the characteristics of that inside the Hall of the Colonnades. Here too were everywhere the signs of an exceptionally violent conflagration. Here too the burnt rafters of the upper layers gave place to a stratum of calcined material of a pale brick-red colour and almost as hard as the native limestone. On the floor level, moreover, below this in places, lay great masses of lime.

The structure itself in its material and arrangement recalled many

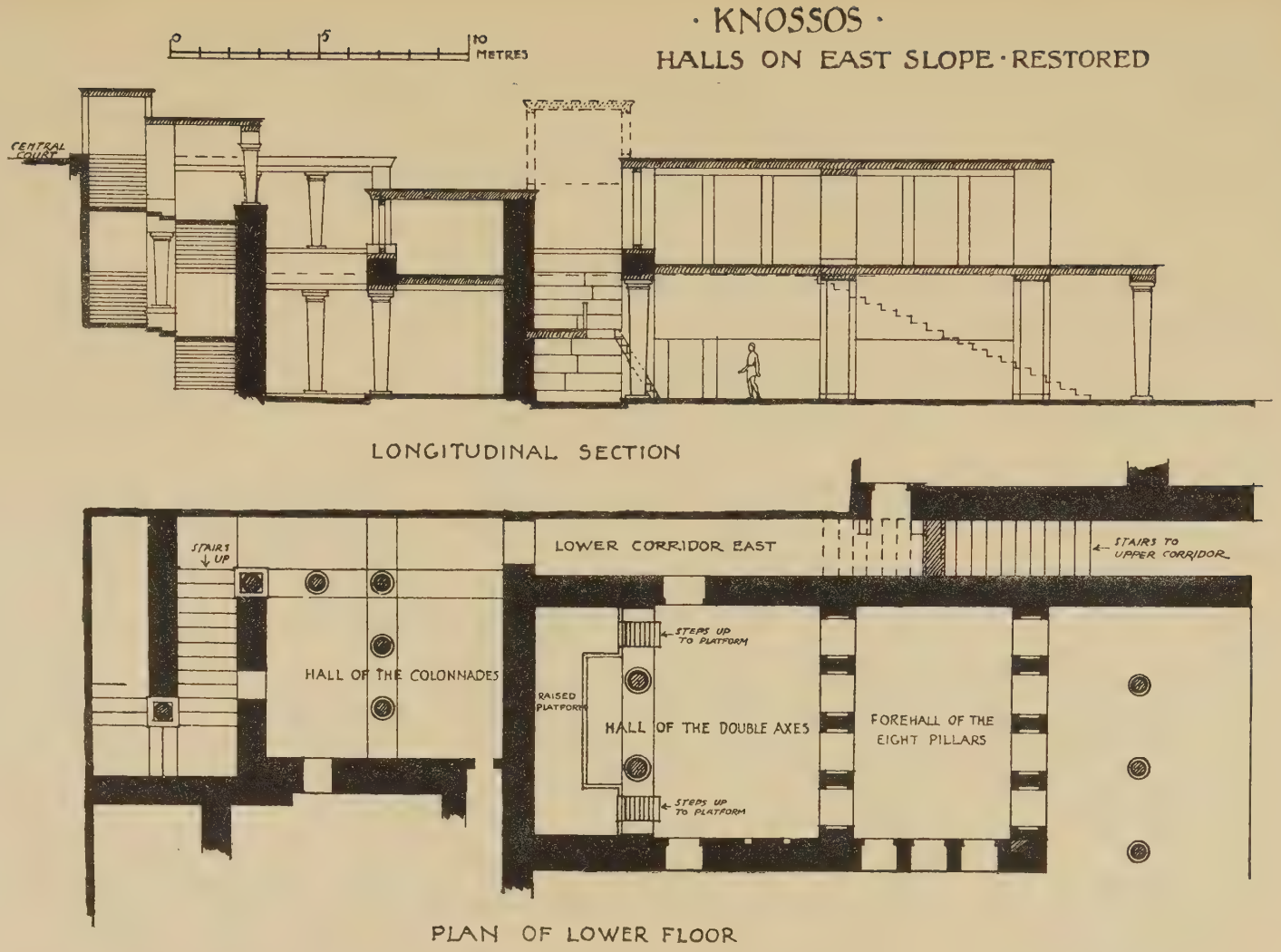


FIG. 33.—PLANS AND RESTORED SECTIONS OF THE QUADRUPLE STAIRCASE, THE HALL OF THE COLONNADES AND THE MEGARON OF THE DOUBLE-AXES.

leading features of that of the neighbouring hall. Here too the western end, which in this case also seems to have been comparatively exposed to the weather, was enclosed with walls of good masonry, but presented a cement-laid floor in place of the stone flags of the interior spaces. Here too, again, the covered part of the building, though well-paved, was surrounded by walls which, behind their original coating of gypsum slabs and stucco, were of merely rubble construction.

Doorway.
Interstice above Fourth Course of Masonry from bottom for Ends of Wooden Beams, refilled except at point indicated.

FIG. 34.—SOUTH-WEST CORNER OF MEGARON OF DOUBLE-AXES.

The western end of this hall was formed by a carefully constructed wall of fine limestone blocks, 8 metres wide, with two wings 4·20 metres long projecting east. The blocks here were larger than those of the other hall, and were incised with the double-axe sign which constantly recurs at the most important parts of the building, but is most in evidence in this great hall, called on that account "The Megaron of the Double-Axes."

Eight courses of this wall were preserved, rising to a height of 4·50 metres, or a little over 13 feet. Its lowest course projects so as to form a plinth, and the courses of masonry are interrupted in the middle by a horizontal cavity,[1] partly filled by coarse lime and terracotta cement, in which were visible the round hollow sockets of beams whose ends had thus been cantilevered into the wall. There were seven of these sockets along the western wall and two on each of the wings, where the same horizontal cavity continued. The only possible object of these projecting beams

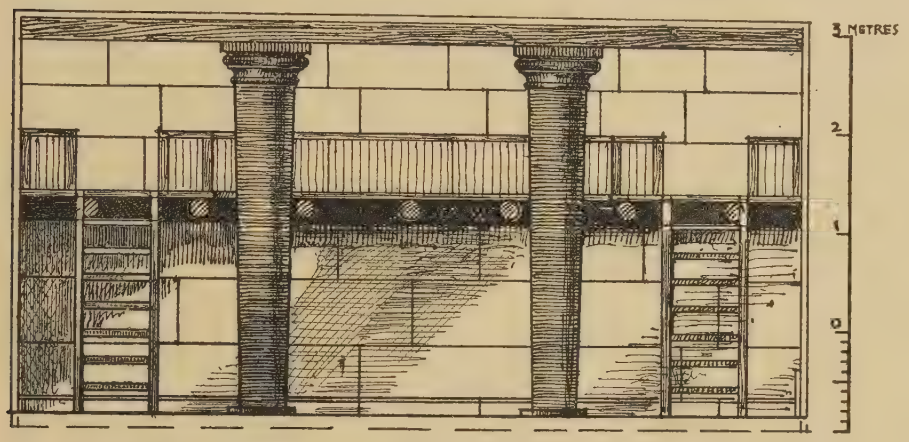


FIG. 35.—WEST END OF MEGARON OF DOUBLE-AXES RESTORED, SHOWING RAISED WOODEN PLATFORM AND STEPS.

must have been to support a raised wooden platform at the end of the hall, approached, we may suppose, by ladder steps at each end (see Fig. 34). It is possible that further wooden steps led from the platform to the *Thalamos* above the *Megaron*.

The drain already traced across the Hall of the Colonnades was found to pass under the western wall of this Megaron and to traverse its south-west corner.[2] No opening to it was visible here, however, as in the other case, and this circumstance, as well as the fact that a wooden platform was

[1] In order to save the upper part of the wall from the danger of subsiding, the greater part of this cavity had to be filled in.

[2] The dimensions of the drain were here arger, 25 centimetres deep by 45 wide, an indication that some additional surface water was supposed to reach it.

constructed at this end of the Megaron, tends to show that it was not exposed to the weather to the same extent as the open area of the Hall of the Colonnades. It is probable therefore that here at any rate the lighting space at the west end of the Hall was partly protected by a lantern above.

The limit of the inner area of the Megaron of the Double-Axes was marked, as in the neighbouring hall, by a gypsum stylobate, beyond which the whole floor level was paved with fine gypsum slabs. On this stylobate, which terminates on either side in two massive cubical blocks, were two column-bases 65 centimetres in diameter, and above them a very interesting feature was brought out by careful excavation, namely, the remains of the two columns themselves in a carbonised condition. Both of these stood with their lower extremities pointing towards their respective column bases, the upper part of the drums sloping away slightly in a south-westerly direction. They were made of cypress wood, and in the case of the more northerly of the two, which was the better preserved, it was possible to make out a length of 2·60 metres, very nearly the full height of the shaft which would have been somewhat over 3 metres. A distinct taper downwards, according to the Mycenaean canon, was moreover perceptible, the diameter of the shaft near the lower extremity in its burnt condition being about 45 centimetres.

Immediately east of the stylobate were door openings in the side walls of the Megaron—that to the north leading, as already described, into the Lower East-West Corridor, that to the south to a finely built passage, the further exploration of which must be part of next season's work. The pavement of this section of the Megaron consisted of a central rectangle of flags of somewhat unequal sizes, surrounded by a border of very fine regular slabs. This arrangement recalled that of the Room of the Throne, and it is probable that in this case too the central area was originally distinguished by a coating of brilliant red cement. The paving of the succeeding section, or "Prodomos" of the Megaron, showed the same arrangement.

At a distance of 5·60 metres from the inner line of the stylobate were three oblong bases with double reveals, and against the walls on either side two half bases of the same kind, leaving four door-like openings across the hall, and about 1·30 metre wide. In the fore-hall, or "Prodomos," in front of these, at a distance of 5·40 metres, were the same number of

similar bases, with half-bases answering to them on their flanks. On the southern side of it, moreover, were two more bases and half-bases, with reveals however only on the side towards the hall. It does not seem reasonable to suppose that this forehall had eleven doors, and the bases, at least, along the centre of the Megaron may be preferably regarded as having supported square pillars. The object of the succession of pillars seems to have been, while keeping as large as possible an open space for the Megaron below, to afford support for similar pillars on the floor above, which possibly in their turn gave support to the structure of a third storey. A line of similar bases was found directly above the first lower row, on a floor level about 3·50 metres higher than that of the Megaron below.[1] There had probably also existed a second row at this upper level, answering to the eastern line of bases in the lower Hall, but owing to the slope of the hill the surface was here denuded to a point below the upper floor level.

Beyond this eastern line of pillar-bases the north wall of the Megaron continues east for another 5·80 metres, thus forming the *anta* of a paved portico of which three column bases were brought to light. How far this portico continues to the south, and on what it opens beyond the face of the Megaron, are questions to be decided by future excavation. The portico was paved with the same fine gypsum slabs and seems to have had a series of square columns along its outer margin. Between the column bases here were found fragments of painted stucco with spiral and rosette designs. Inside the Megaron the intensity of the conflagration seems to have completely destroyed these decorative elements. On the floor-level near its west wall, however, were found several pieces of stone vessels including the upper part of a very fine vase of a mottled red and grey colour. The cutting of this vase, which belonged to the pointed class, was bolder than any of those found in the Room of the Stone Vases. It had a very pronounced ring round its neck and deep sharply edged fluting down the sides. It seems to belong to a somewhat more archaic class than the fluted vessels of the other deposit.

The "Megaron of the Double-Axes," of which a perspective sketch by Mr. Fyfe is given in Fig. 35, is by far the largest Hall as yet laid bare on the Palace site of Knossos. Its breadth—8 metres—cannot indeed

[1] All were preserved *in situ* except the half-base that must originally have stood by the south wall of the chamber.

compare with that of the Great Megaron discovered by the Italian Mission at Phaestos, which is no less than 13·70 metres broad. Its length on the other hand—reckoning from the outer edge of the Portico 24·40 metres, or nearly 51 feet—is 2·70 metres larger than the Phaestian Megaron as measured from the top of the entrance steps. The interior

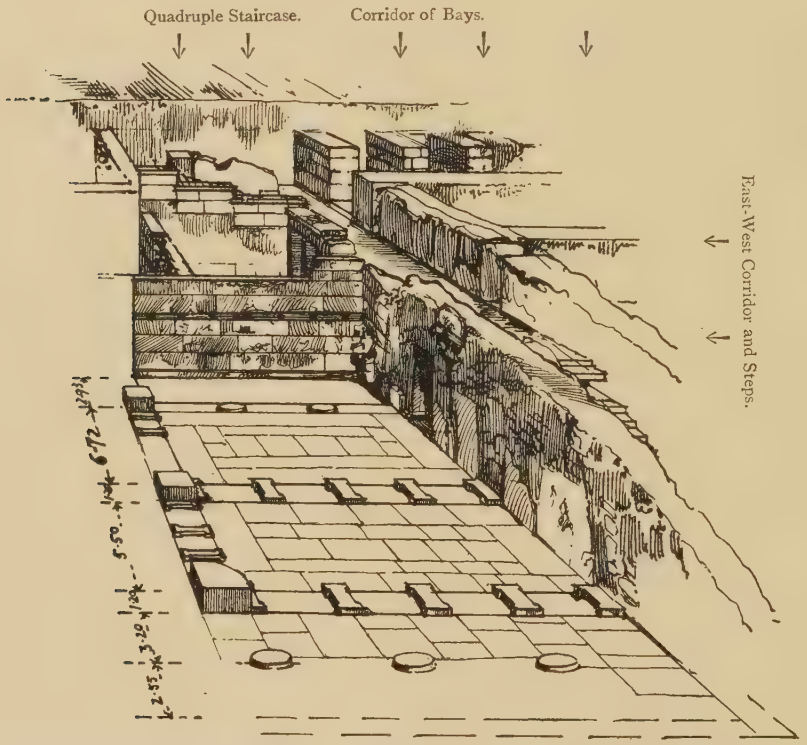


FIG. 36.—PERSPECTIVE SKETCH OF MEGARON OF DOUBLE-AXES (South Wall omitted) WITH HALL OF COLONNADES AND STAIRCASE BEYOND.

length of the inner hall with the columns,—about 10 metres,—is almost exactly the same as that at Phaestos. The great Hall which originally extended from the Corridor of the Bays to the Area of the Spiral Fresco and High Reliefs,[1] seems however to have been more extensive than either.

The upper floor seems to have consisted of a spacious room with pillars at intervals like those below, of which, as already noted, the bases of the

[1] See above p. 90.

western series remain. In the course of excavation these had to be temporarily removed but have been replaced as originally found, and at their proper level, by means of a wooden scaffolding. In the earth beneath these were embedded the carbonised remains of round beams about 40 centimetres in diameter running from east to west. A part of the rubble wall has been preserved between the eastern section of this upper chamber and the East-West Corridor, from which access had been obtained to it by means of a doorway over that leading from the Lower Corridor into the Megaron below. On this wall had been happily preserved a piece of the original painted stucco, exhibiting a design of palm-like trees, executed in a somewhat careless style and resembling one on the wall near the throne, beside which were single horn-like objects, which may have had a sacral significance. What remained of the fresco was only about 80 centimetres high, but the painted dado could be traced for about 3 metres.

Just within the eastern section of this upper chamber, near the pillar base by its northern wall, lay a large block of carbonised wood which may either have been part of a pillar or a natural trunk.

It is possible that the "Megaron of the Double-Axes" was originally approached up the eastern slope of the hill by a broad flight of steps analogous to those of Phaestos, but this point can only be decided by further investigation.

§ 38.—Discovery of Parts of a Stone Bull, Carved in the Round, and of Bone Plaques inscribed with Signs and Numbers.

The region south of the Quadruple Staircase and the two Halls is also as yet too imperfectly explored for adequate description, though features of considerable interest have already come to light in this region. Remains of two storeys seem to have been preserved throughout the greater part of this area. In an upper chamber near the terrace of the Central Court, a stone bench and parts of the floor slabs have been preserved in position above the fine masonry of a lower room.

Two very interesting discoveries have come to light in this area, inside what appears to be a large stone drain or "cloaca" analogous to that of the Northern Entrance. It was approached by a chimney-like stone shaft, the mouth of which, closed by a slab, was partly under the

door-jamb of an upper storey floor-level, that lay 1·60 metres beneath the surface. From this point the shaft descends another 5 metres to the junction of a northern and eastern course of the conduit, which was itself spacious enough for a man to make his way along it. In the eastern passage were found pieces of a large bull, carved in the round out of a dark schist-like stone, perhaps a kind of steatite, the pieces having numerous small dowel-holes at their back so that they could be riveted together. It would appear that this comparatively soft material, which naturally commended itself to the early sculptor, could only be obtained in small lumps, so that the statue of the bull in the round had to be built up in this way. At the date when the excavations closed for the season, only a few pieces belonging to the lower part of the bull's body had been got out.

The other discovery in the same subterranean passage does not yield in interest to this. Near the remains of the bull were found quantities of bone pieces, of fish-like outline, resembling the *vesicae piscis* let into the medallions of the gaming table. With these were bits of Mycenaean porcelain, apparently for inlaying, and some crystal plaques also belonging to a similar board. There were further found segments of bone rings of various breadths, resembling bracelets, and decorated with exterior mouldings. These had been originally covered with thin gold plate, parts of which were adhering.

The upper surface of the bone "fish" was relieved with fine parallel ridges and grooves, and on their under sides were engraved a series of signs accompanied by various scores in the shape of perpendicular lines, like those which on the clay tablets with the linear script indicate units. Similar signs and figures also appeared on the inside of the bone rings. One sign only appears on each "fish," but sometimes two together on the rings.

The amount of these remains will probably be greatly added to by the continued excavation of the stone conduit. Here it must be sufficient to mention that as yet some twenty different signs have come to light, linear in type but not answering to those of the ordinary linear script of the Palace. A most remarkable phenomenon, however, is observable in the forms of these signs. Out of twenty-one varieties, ten are practically identical both in shape and position with later Greek alphabetic forms, while four more are the same though in a different position. Thus we have: Δ, Λ, Η, Ν, Ξ, Π, Ρ, Υ, +, and a form approaching the digamma,

as well as 𐄡, 𐄢, –, 𐄣. Yet the Mycenaean date of these bone pieces is as well ascertained as anything found within the walls of the Palace. They are of similar type to pieces of the gaming table, and are associated with porcelain and crystal inlays answering in character to specimens found in the shaft-graves of Mycenae. They lay here beneath an untouched floor-level in a closed passage 6·60 metres, or over 21 feet, beneath the surface of the ground.

Each sign is associated on different pieces with various numbers; thus we have:

+ II, + III, + III II, + III III, + IIII IIII.

It must be observed with reference to these signs and ciphers that their appearance is analogous to that of the signs and dots that appear on the under side of the porcelain roundels and other plaques for inlaying, such as those found in the Throne Room.[1] The dots also appear among the numerical signs of the hieroglyphic tablets representing units, like the upright strokes on the tablets with the linear inscriptions. Some porcelain plaques found with the bone fish also show this dotted numeration. The marking of porcelain pieces for inlay with linear signs of a similar class is, as already pointed out, common to Egypt, and their appearance at Tell-el-Yehûdiyeh had even led to a theory of Greek restoration,—"probably of the time of the Ptolemies."[2]

An interesting feature of the case is that, on the back of some of the Tell-el-Yehûdiyeh plaques, the Greek-looking signs are replaced by ordinary Egyptian hieroglyphs. Out of the linear signs found there, of which there seem to be twelve varieties, eight are almost or quite identical with types found on the Knossian bone fish. On the other hand, in Egypt, a series of linear signs of the same class occur as marks on pottery from prehistoric times down to the latest dynasties,[3] and those

[1] Porcelain plaques, some making up a scale or feather design, with signs and dots, have now been found by the Italian Mission in the Palace at Phaestos.

[2] In pointing out the parallelism of the signs as to Knossian plaques with those of Tell-el-Yehûdiyeh, in my previous Report (p. 42), I was not aware that this suggestion had been made (Brugsch Bey, *Rec. des Travaux*, etc., 1896, p. 1 *seqq.*). Dr. Von Bissing, who kindly called my attention to this, informs me that these marks on Egyptian porcelain plaques, to which he has for years directed his attention, are extremely rare.

[3] See Professor Petrie's table of these signs, *Royal Tombs of the First Dynasty*, Pt. I. (1900), p. 32.

found on the porcelain plaques may be regarded as a selection from a large existing class.

It is possible that some such selection had been adopted for purposes of arrangement by an ancient guild of Egyptian inlayers. The reappearance of similar forms in Crete must in any case be taken in connexion with the fact that they are there employed by the artisans of a similar craft, who were copying the Egyptian methods and patterns of inlaid work, whether in porcelain, bone, or ivory. The bone fish, as may be seen by comparing them with the ivory pieces of the same form fitted into the medallions of the gaming board, go with the central lozenges with incurving sides to form a disk pattern of typically Egyptian character. Porcelain disks with this design occur already under the Eighteenth Dynasty, and the enamelled plaques, also presenting linear signs below, found in the Throne Room, like those of the fourth shaft-grave at Mycenae, were simply copies of these contemporary Egyptian models. It is reasonable to believe that the similar linear signs that accompany the products of this Cretan offshoot of the Egyptian inlayers' art were in many cases actually taken over from the old Egyptian series.

It is to be observed that these signs do not correspond with the character of the ordinary linear script of Knossos. They are equally distinct from the pictographic group. Neither do they agree with the signs cut on the stone blocks several of which, such as the predominant double-axe type, the trident, the star, the branch, the cross-patée and the sistrum-like character, are suggestive of religious symbolism. There is no evidence as to whether these signs on the plaques for inlaying had any phonetic values, but it is at any rate an interesting fact that forms identical with many of the later Greek letters should have been in use for technical purposes in the Aegean world centuries before the introduction of the Phoenician Alphabet. In this case, as in that of the other Cretan sign-groups, a possible survival and eventual reaction on the imported Semitic letter-forms can not be excluded.

EXCAVATIONS AT ZAKRO, CRETE.

By D. G. Hogarth.

§ 1.—The Zakro District.

Excavations were undertaken by me on behalf of the Cretan Exploration Fund in the spring of 1901, in pursuance of a programme for exploring the Eteocretan country. Primitive remains had been noted in the Zakro district, by Captain Spratt in 1852,[1] and been more fully described by Prof. F. Halbherr in the *Antiquary* for 1892 (p. 153). They were visited later by others, notably Prof. L. Mariani in 1893. Mr. A. J. Evans in 1894 and 1896 visited the upper valley, and besides giving a short account of what he saw in the *Academy* (July 4, 1896), preserved very full notes made on the spot. When a coastal site in East Crete was desired, he recommended these remains, near a natural port, the last on the directest sea-route from the Aegean to the Cyrenaic shore, to my attention.

The district of Zakro lies on the eastward fall of the highlands, which, rising from the low isthmus of Hierapetra, form the Eteocretan peninsula. Their last elevation runs as a continuous naked ridge from north to south and from sea to sea right across the butt of the island, parting the central upland, of which Praesos was the centre, from the eastern sea; and their final slope is divided into four basins opening to the east. The two northernmost of these contain respectively the sites of Eremopolis (*Itanos*) and Palaiokastro, the two southernmost those of Zakro and Xerokambos (= *Ampelos* according to Spratt, Halbherr, and Evans, but very doubtfully). The southern part of the mountain barrier is the most rugged, and the

[1] Pococke, to whom Spratt refers, mentions no ruins and was obviously never at Zakro.

natural access to the southern basins is not from their own *hinterland* on the west, but from the basin of Palaiokastro, itself entered by an easy pass from Sitia behind the ridge. Of these four basins, that of Zakro is by a little the largest.

The spur, which divides it on the north from the basin of Palaiokastro, bends round southward in a direction parallel to the coast-line, and further subdivides the Zakro district into a broad and undulating upper trough on the west, in which lie the settlements of Karoúmbes, Azokéramo, Kelária, Adhravásti, and Epáno Zakro (the last by far the most considerable); and on the east two small deltaic plains at the mouths of the gorges, through which escape the waters of the upper trough, collected on the high western

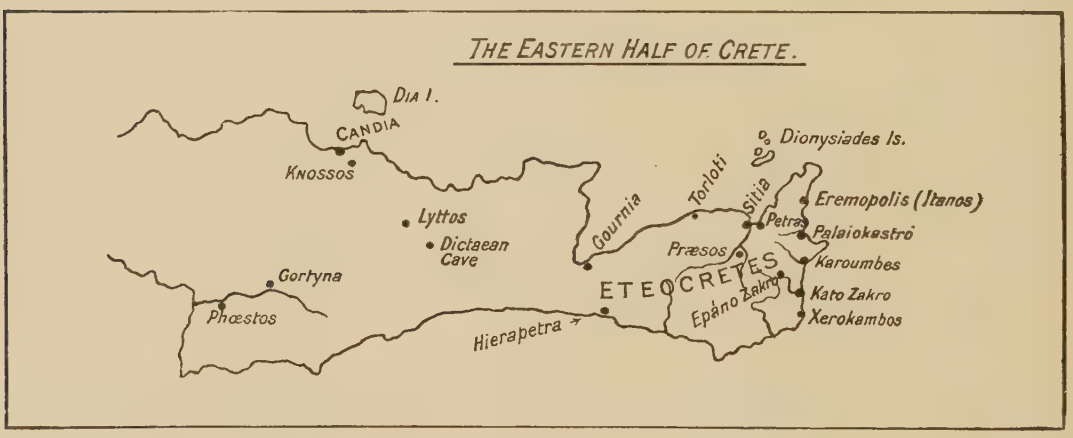


FIG. 37.

ridge. Both these deltas contain conspicuous megalithic ruins, and both show signs of having possessed harbours in antiquity. At the apex of the northern delta, that of the Karoúmbes river, are two groups of Cyclopean buildings,[1] of two of which several courses remain, and near the natural port, formed by a horseshoe of high reefs, are other ruins less well preserved. These buildings have in no case retained enough earth to make their excavation worth undertaking, but the character of their construction and the sherds lying about them sufficiently show them to belong to the same period as the town about to be described in the southern delta.

[1] Mentioned by Spratt (I. p. 234), Halbherr (*Ant.* 1892, p. 153) and Mariani (*Mon. Ant.* vi. p. 298).

The second delta spreads fanwise from the point at which the principal stream of the district, the Zakro river, finally escapes from a cañon, some five miles long, impassable by loaded animals, with sides for the most part absolutely perpendicular and varying from 500 to 800 feet in height. This delta is larger than that of Karoúmbes, less marshy, and possesses better water. While the latter, therefore, is now without inhabitants, the former contains a small hamlet, Kato Zakro, grouped about a double church of the Virgin of the Ascension and St. Antony, and is the *scala* of the district. Charubs and other produce are brought down to it from all the settlements in the upper trough, and three stores stand on the beach for their accommodation. The deep bay, possessing excellent anchorage near inshore (cf. Spratt, *l.c.*), and protected by long headlands from all winds but the very rare easter, is not used only by local coasters, but is the best known *rendezvous* and port of call for the fishing fleets of the eastern islands, which sail annually to the sponge grounds off the Libyan shore from Madrúcha to Bengázi. During my stay of six weeks, three days never passed without the appearance of some of these boats, carrying crews of from ten to five and thirty hands ; and often from ten to twenty sail rode at anchor at once. For sailing craft the bay of Zakro is still the principal station on the road from the Aegean to Libya (*v.* Plate IV., No. 1).

The whole district is exposed to terrific denudation, owing to the heavy precipitation on the abrupt eastern face of the Sitia mountains. I had myself the fortune (or misfortune) to witness a signal instance of this natural process—viz. a sudden flood which swept the whole plain on May 15th, and in two hours changed the face of the landscape, leaving stones and naked rock where fields, vineyards, and groves had been, and carrying to the sea 4,000 trees. Consequently the primitive remains are of very fragmentary and scattered character, and would now be non-existent had not malaria prevented any considerable and permanent modern settlement in this plain. Indeed it appears that for a long time it had no inhabitants at all after the decay of Cretan sea-borne commerce at the close of the Mycenaean period itself. There is hardly a scrap of pottery either on the soil or in it belonging to any subsequent age.

§ 2.—KATO ZAKRO. THE PITS.

The principal remains, already described by Mariani as they appeared before excavation (*l.c.*), occur on two spurs which descend from the range of

hills and are divided by a narrow valley. That lying farthest inland is comparatively rugged and difficult of access and rises to a sharp peak, on which are traces of rough fortification (*v.* Fig. A, "Acropolis"). Falling sheer to the river on the west, and protected by cliffs on the north and east, it is easily accessible only from the south; and on that side remain fragments of massive Cyclopean walls which seem to have formed a continuous curtain above the plain (*v.* Fig. A, Nos. 1, 2, 4, 5, Plate IV., No. 2). Within this fortification are very scanty traces of house-foundations; but so denuded is the crown of the spur, that little evidence could have been obtained of the character of its former inhabitants were it not for the occurrence of two depressions, probably due in the first instance to erosion, but enlarged by man's device. Of these the principal is a bottle-shaped pit, the Λάκκος of Halbherr and Mariani, about 18 feet deep by 16 feet longest diameter, with very rough floor and sides (Pit 1). This I found nearly half full of earth with which were mixed an enormous quantity of pottery, and a few other remains. Of the 8 feet of deposit, the three uppermost had been disturbed by peasants who began to plunder the pit some fifteen years ago, but had desisted before Halbherr's visit. The other five feet were untouched. I may summarise their contents, first saying that there was no sign of stratification—no layers of ash alternating with pottery, as in the Dictaean Cavern. There was also hardly any trace of bones or other organic remains. The pit was apparently filled with tumbled pottery, stone vessels, and rough blocks, among and over which water had laid a thick loam. As all who had previously seen it expected, it proved well worth exploration, although Halbherr's hope that it might serve to reveal the ancient name of the site was not realized, all its contents being of much earlier period than had been suspected.

Three obsidian flakes were found in the pit and a few minute fragments of bronze pins and blades, but not a trace of iron. Some bits of stucco-plaster, painted blue and yellow, and fragments of bone implements also occurred. The remains of stone vessels were neither numerous nor remarkable. Such as there were proved to be either small bowls in steatite, or ruder utensils, such as mortars in rough limestone. A spouted jug in coarse blue-veined marble of a typically ceramic shape alone calls for special mention. The mass of the find was in earthenware, and included about eighty unbroken vases among thousands of fragments.

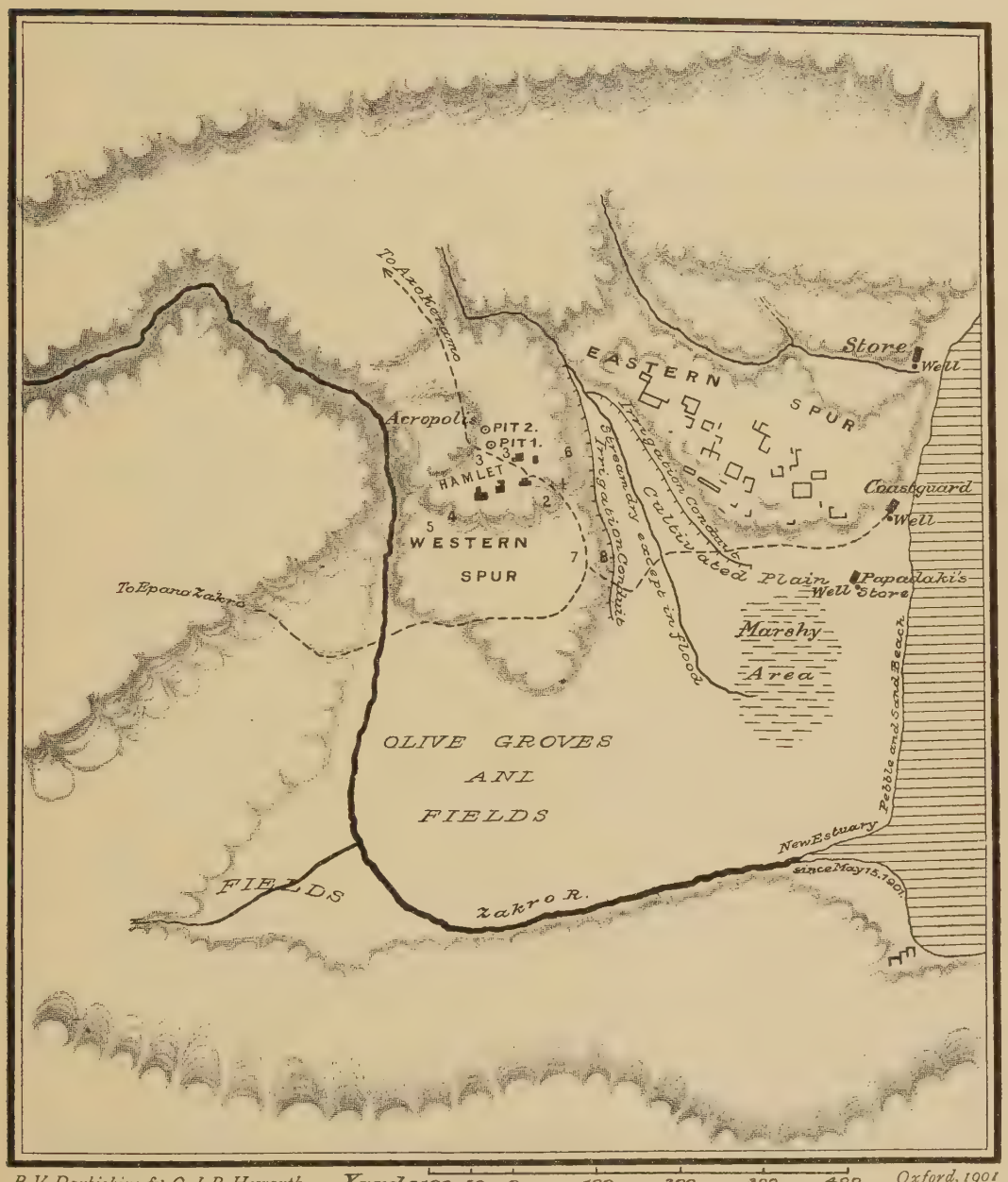


FIG. A.—SKETCH MAP OF THE ZAKRO DELTA.

Four-fifths of this pottery may be referred to the best Knossian Mycenaean period, and such of it as is of painted fabric, is distinguished equally by the richness of its decoration, and the frequent use of white pigment added after firing. Two vases in particular may be mentioned, which show beautiful white floral designs painted over the already glazed decoration. Shallow bowls, decorated both inside and out, prevailed in enormous proportion. The remaining fifth was of the unmistakable Cretan pre-Mycenaean ware known as "Kamares." But while the forms (straight-sided cups of the Vaphio type and one-handled bowls) and the fabric and glaze are identical with that of the Kamares ware of mid-Crete, the schemes and colouring of the decoration vary from those observed there, and coincide exactly with the prevailing schemes on the Zakro "Mycenaean" ware. The natural inference is that we have here a very late Kamares fabric, immediately preceding the introduction of the Mycenaean glaze and pigment. But the fact that this Zakro Kamares ware passes without any sign of violent change into Mycenaean is very important and contrary to what has been observed at Knossos.[1]

Of hand-polished neolithic ware, whether plain or incised, there was not a trace in this pit; nor was the geometric Kamares ware, which seems immediately to succeed it,[2] represented. The more distinctly metalloid forms, so characteristic of the mid-Cretan ware, were also absent. These seem to belong to the acme of the Kamares period; and the fact that they were not found at Zakro supports the theory that the settlement there belongs at earliest to the close of the pre-Mycenaean phase of Cretan civilisation.

I have said that this pottery was not stratified. Kamares fragments were found both above and below Mycenaean. This fact might be explained either by supposing the contents of the pit to have all been thrown in together in the later period, and to have been the accumulation of centuries; or by supposing that at some subsequent date the pit was very thoroughly rifled for metal objects and other valuables, and its contents were turned over in the process. This would explain the small proportion of metal found.

This remarkable pit may have been a mere ordinary refuse receptacle

[1] The special study of this pottery was undertaken in Candia by Mr. J. H. Marshall; but an attack of fever compelled him to leave the island prematurely, and having now accepted a post in India, he has had to abandon the work. I must therefore defer a detailed report.

[2] v. *Journal of Hell. Studies*, xxi. p. 96.

for the small town about its mouth. But when I note (1) that it has been enlarged by man's labour, though not to serve any purpose of burial; (2)

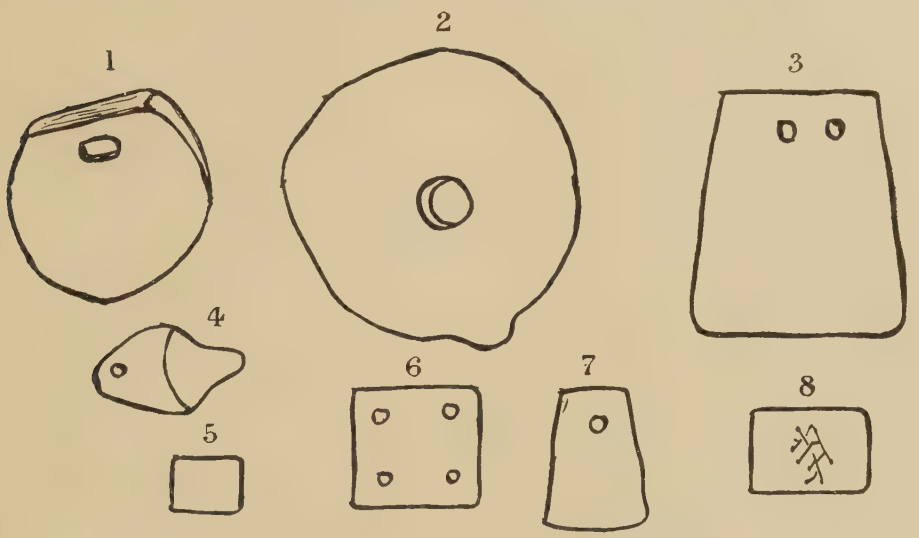


FIG. 38.—TYPES OF PIERCED CLAY OBJECTS FROM THE PITS (1 : 2).

that it contained a large number of complete vases, almost all of types which prevailed in the sanctuary on Dicte; (3) that its pottery is of

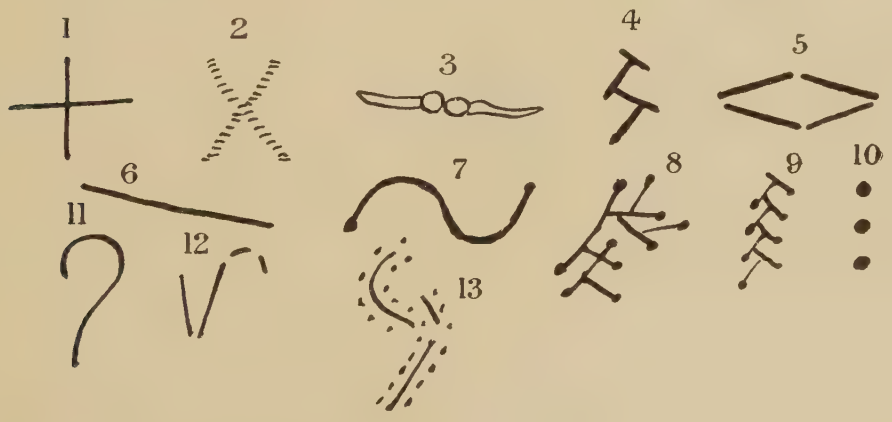


FIG. 39.—CHARACTERS INCISED ON PIERCED CLAY OBJECTS FROM THE PITS.

richer character than was commonly found elsewhere at Zakro—I am inclined to support the conjecture made at a venture by both Halbherr

and Mariani, and see in it a receptacle for the superfluous *ex votos* of a neighbouring shrine. A similar reason has been suggested for the existence of pits at Knossos and in Melos (*B.S.A.* vi. p. 72), and for the trench opened by Prof. Petrie in the Apollo Precinct at Naukratis.

FIG. 40.—CHARACTERS ON TWO POTSHERDS AND TWO WEIGHTS FROM HOUSES OF THE LOWER TOWN.

In the earth about the pit's mouth were found (besides much pottery thrown out by the earlier searchers) a three-faced intaglio in steatite of coarse style, a pear-shaped bead in milk-agate, and a silver *scudo* of

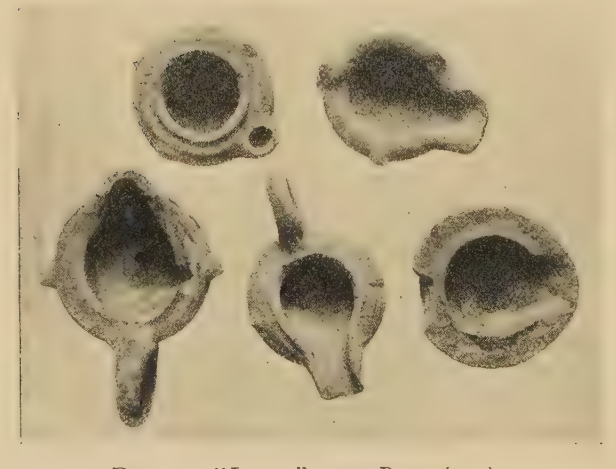


FIG. 41.—"LAMPS" FROM PIT 2 (1 : 4).

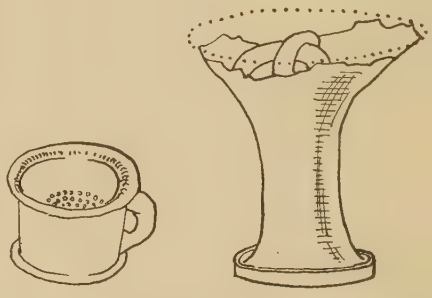
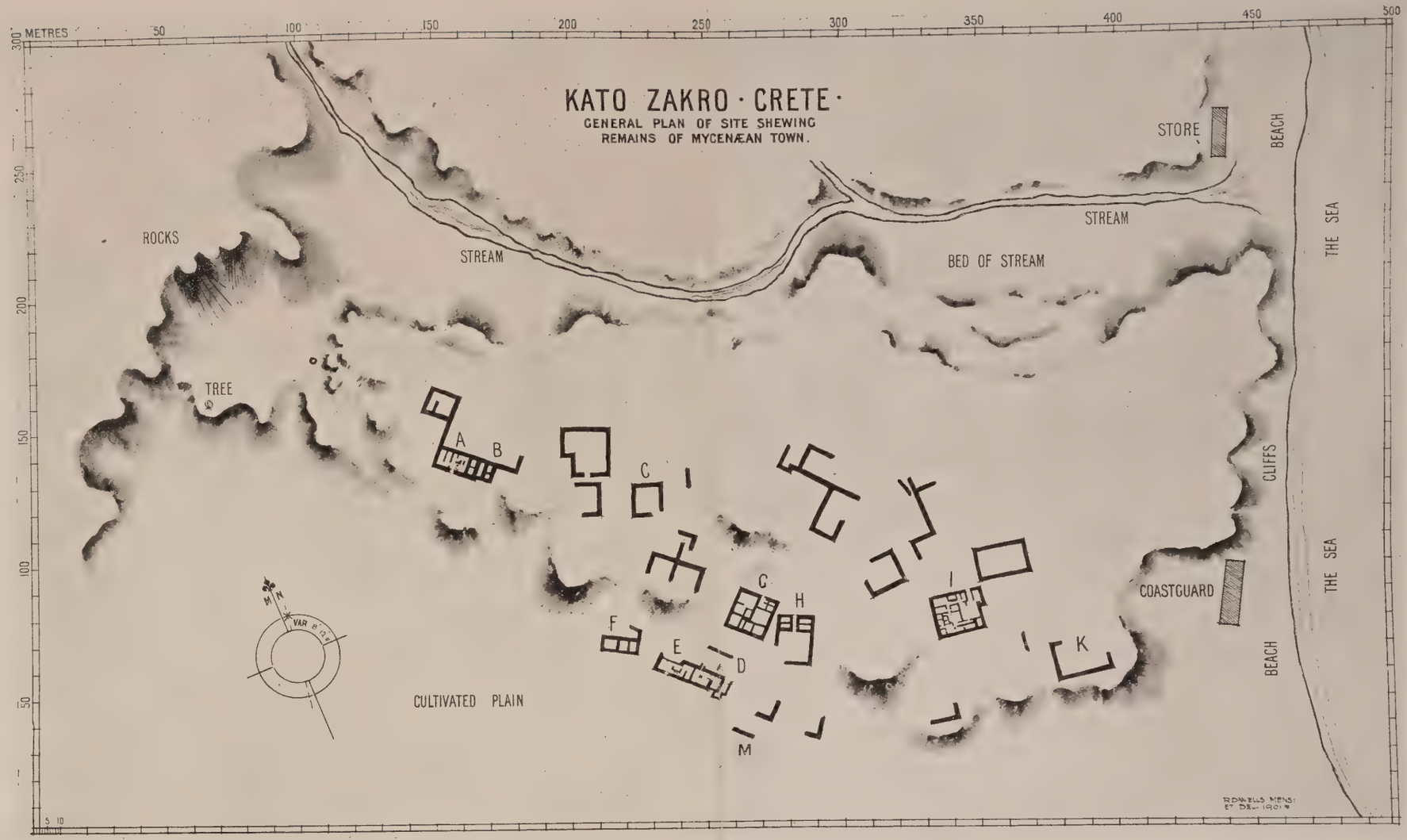


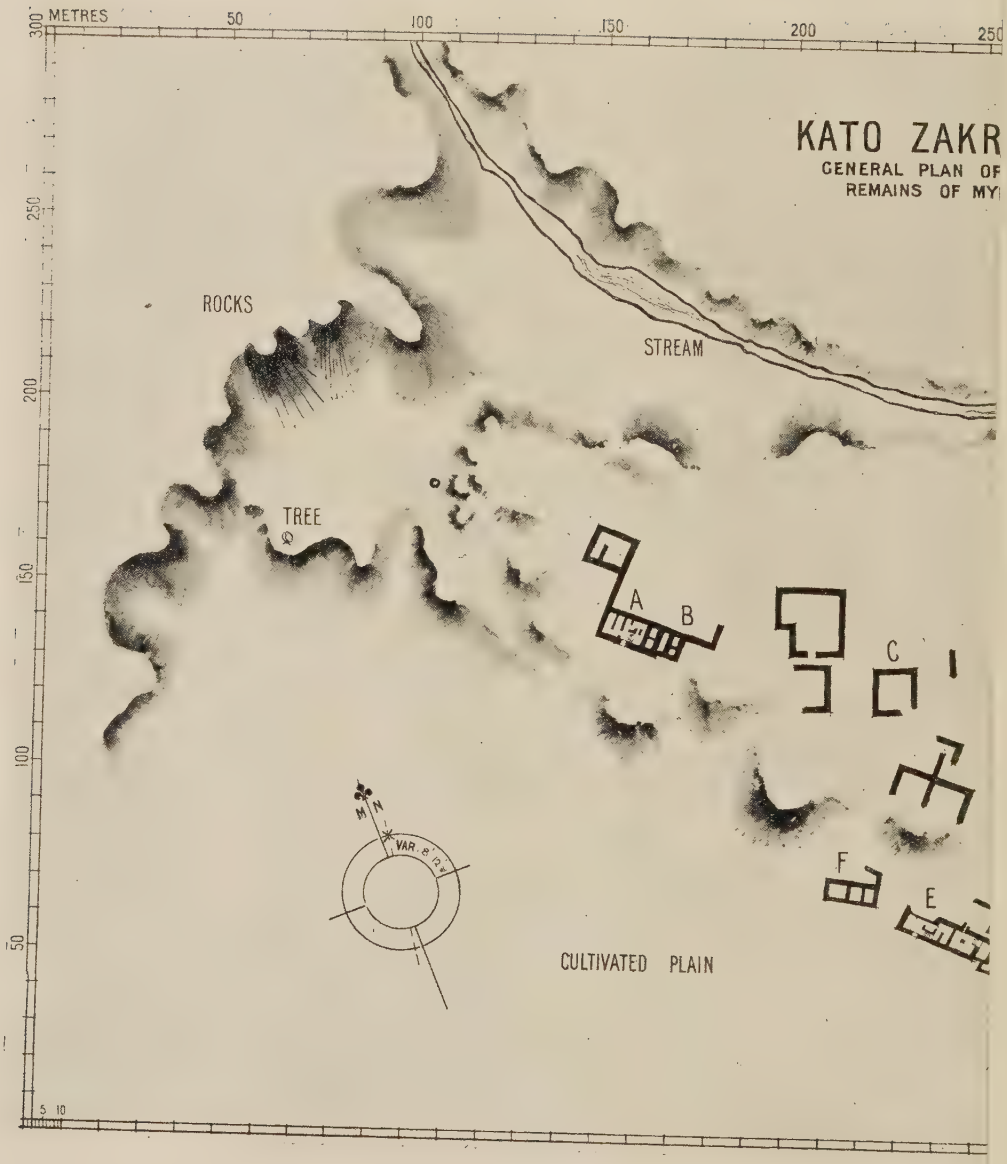
FIG. 42.—STRAINER AND CROSS-HANDLED "FRUIT STAND" VASE (1 : 5).

Francesco Erizzo, Doge of Venice, 1631–1646. As is invariably the case on such sites, vast numbers of clay objects pierced for suspension occurred both in the pit and elsewhere at Zakro. I give the different types in Fig. 38, and the symbols cut or impressed on certain of these, in Fig. 39.



[*Face p.* 129.

Map of the Eastern Spur, or Lower Town.



Map of the Eastern Spi

The second pit (Pit 2) was about fifty feet to the north of the first. Two successive lime kilns had been constructed above it. It was of irregular shape, and of a depth ranging from 1·50 at the north to 2·50 at the south end. Below the lime occurred vast quantities of pottery in a much perished condition, including nineteen unpainted lamp-like vessels (Fig. 41). The painted ware was identical with that found in the first pit.

Near the mouths of these pits I found foundations of houses, and others (Fig. A, Nos. 7, 8) lower down (*ibid.* 3, 3); and at some distance to the south-west I discovered a house (*ibid.* 5) still retaining a little deposit and unbroken vases of the latest Mycenaean period. Another house was not entirely destroyed on the east slope (*ibid.* 6). Remains of brick party walls survived and two vases worth representation (Fig. 42). Both are in unpainted ware, the "strainer" having a buff slip. On all the rest of the slopes of this spur, rock occurred close to the surface wherever I probed.

§ 3.—THE LOWER TOWN.

The eastern and lower spur (*v.* Fig. A, and Plate III.) rises steeply from the opposite side of a shallow cultivated ravine, the basin of an insignificant torrent whose waters are artificially conducted through two conduits under the slopes. In the great storm of May 15 this torrent broke bounds and swept a channel anew down the centre of the ravine. From the crown of its western and southern slopes the spur falls away gently northward to another torrent bed. Seawards it terminates in a cliff thirty feet high. The summit and northward slope are denuded equally of earth-covering and of ancient remains. On the westward and southward slopes appear massive walls which for many ages have retained a few feet of earth terrace-wise, and have been from time to time repaired to prevent the escape of this earth. Their outlines were much obscured by growths of wild olives, almond, and charub trees, and by a cumber of fallen stones.

§ 4.—HOUSE *A*.

On the westward face of this spur at its highest point, three sides of a tetragonal structure of Cyclopean style were conspicuous (Plate IV., No. 3: this I take to have been Mariani's "Temple"): and as this obviously had retained some feet of deposit I explored it first (House *A*). To

north and east of it, foundations of other quadrangles, apparently in connection, were visible, but, being on the crown of the spur, these held up no earth. Feeling along the soft rock surface from the east, I found it to fall suddenly away beyond a long revetment of small unbonded stones. The space contained by this and the Cyclopean walls, a space of some 17 feet by 43 feet, was the area to be excavated (Plate IV. 4).

A proved to contain eight rooms, preserved to an average height from their floors of five feet six inches, and entered by a wide door from the gorge, along whose eastern slope runs a paved road. The two rooms (1, 2) built of unfaced stones were mere cellars, used for storage and entered from above. They contained many small ashlar blocks and large bricks, remains of an upper structure. The other rooms are distinguished by having party walls of flat lightly baked bricks, laid on stone foundations. These bricks are unusually large, being of two sizes, the larger, 24 inches × 16 × 4, the smaller, $13\frac{1}{2}$ inches × 12 × $3\frac{1}{2}$. It has long been supposed that the upper courses of "Mycenaean" walls were in brick, but no bricks have previously been found *in situ*. The Zakro specimens were well and squarely laid, and admirably preserved. A coat of mud-plaster, mixed with coarse straws, faced the brick; and over this was laid in some places a finer painted plaster.

The entrance hall (**4**) is floored with pebble concrete ("tarazza"). It contained certain interesting features. A square pillar base (v. plan) rests on a rough stone plinth let into the fine pebble concrete floor. Its height from the plinth is 1′ 2″. All four sides have a double coat of plaster, the inner coarse and 20 mill. thick, the outer fine, 4 mill. thick, and painted in a blue monochrome. The top is smoothed but not plastered, and as no other blocks and few bits of plaster lay in the vicinity, I feel certain that its continuation was represented by a quantity of burnt straight-grained wood found standing upright above it. The position of this pillar is hardly consistent with its having served any serious structural purpose. Though it stood centrally in the entrance hall, the first object to strike the eye of the incomer, it was barely a foot from the massive brick wall, behind which is chamber **6**. If it was a sacred "Pillar of Stablishment," the probability that its main part was of wood is especially interesting.

The group of basins on the left of the main entrance is remarkable. The larger is 2 ft. in diameter and communicates through a wide vent with the easternmost of the smaller ones, the rim of which is level with the bottom of its feeder. The third small basin is on the same level, but independent. Nothing was found in any of these basins but earth. A similar group was found later in another House *E*, also in the entrance hall, but not so near the doorway; and two, the one feeding the other, by the "wine-press" in House *I*, to be described presently. It should be mentioned here that in *A* the upper basin was backed by a wall of packed earth and small stones, on the further, *i.e.* S., side of which was a vertical face of thin uncoloured plaster preserved to a height of 3 inches only. This plaster face, turning horizontally, continued for a short way southward over the concrete floor, and then was lost until it reappeared near the south wall, and turned again vertically up the face of that wall. It seems to follow that in the south part of the entrance hall was a shallow tank, less massive than the "press" in *I*, but standing in like relation to a group of basins. Its eastern limit could not be determined.

KATO ZAKRO, (CRETE)

MYCENÆAN HOUSES.

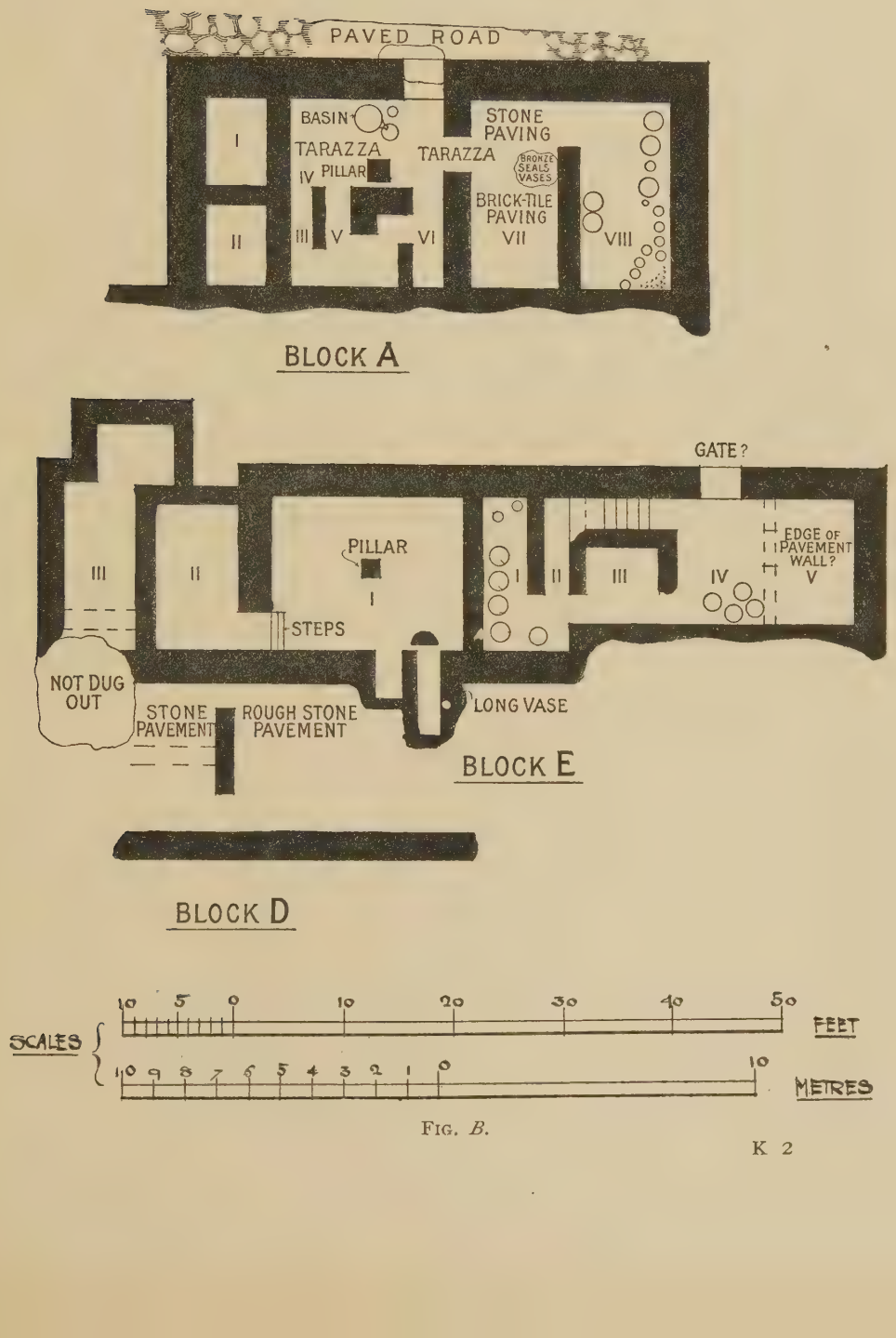


FIG. *B*.

Within the main western doorway lay a very solid concrete floor made of unusually large pebbles. The threshold, a single block much worn, 4 ft. × 1.8 × 1.3, bears three dowel-holes, two at the south end and one at the north. On the outside a single rough step descends to a rudely-paved way about 4 ft. wide, running under the face of the structure.

In the entrance hall nothing was found but remains of two small jars lying in the upper earth, as though fallen from above. Nor were rooms **5** (except where, in the communication with **3**, a beautiful marine vase was found) or **6** more productive. It is hard to see what purpose these strait chambers can have served. The massive character of their west wall, combined with the fact that they had no flooring but mud and were full of carbonised matter and fallen bricks, larger than those of their walls, suggests that they (like **3**) were cupboards under a stairway or landing, by which access was obtained to an upper structure.

A broad doorway leads north from the entrance hall into two large chambers, which, not only from their size but the character of the objects found in them, must be regarded as living rooms. No. **7** is paved with stone slabs at its west end, where it gives passage to No. **8**, but for the rest

FIG. 43.—TYPICAL PAINTED VASES FROM HOUSE A (1 : 5).

FIG. 44.—BRONZE KNIFE, MATTOCKS AND DRILLS FROM HOUSE A (1 : 4).

with burnt brick tiles laid on a few inches of packed earth which contained fragments of "wavy-stripe" Mycenaean ware, but not a scrap of Kamares ware. Immediately on the tiles lay carbonised matter mixed with potsherds and bits of painted plaster showing traces of a yellow pattern on blue ground; but above this, at a height of 1 ft. 6 inches from the floor, and under a mass of disordered bricks of the largest type (24 inches × 16 × 4) occurred a remarkable group of objects, lying at all angles as if fallen from above. The first to appear were fragments of a large bronze knife or sword: then a large steatite "lamp" or altar, so greatly calcined that it mostly fell to dust; then two almost perfect painted vases of the "hole-mouth" strainer form with parts of about ten other painted vases all belonging to late Mycenaean types (Fig. 43); then two heavy bronze tools, like broad mattocks, and four massive round bronze points, solid except for a slight indentation at the base. As these can have been but weakly attached to any shaft, they can hardly be spear heads. I suggest that they were drills for agriculture (Fig. 44). Finally there was scattered over a small and roughly circular space among and about the bronzes an immense number (nearly

500) of well preserved clay nodules bearing impressions of intaglios (Fig. 45). Most of these have two or three faces, and were evidently seals attached to documents.[1] Among them lay a broken baked clay wedge 48 mill. long × 12 mill. broad, showing obliterated characters in the linear Knossian script on both faces; and a roughly circular tablet (28 mill. diam.) of fine baked red clay, bearing on one face an inscription in the same script traced with a fine point, and on its rim two "countersigns" impressed faintly with a signet-gem (type, two wild goats). On another part of its rim appears also the impress of some textile material.

The sealings all have been hardened by fire, but whether in the baking or accidentally by the conflagration which evidently destroyed the structure in which I found them, it is impossible to say. The fact that they were found over a restricted and roughly circular area suggests that they had fallen all together from a height on the collapse of some receptacle in which they had been stored. Ere they fell, the floor of the chamber had been covered to a considerable depth with burnt matter and other deposit. The large bricks, whose pent over them is mainly responsible for their preservation, look like the flooring of the terrace above. It would appear, therefore, that these sealings, tablets, bronzes, vases and the rest had been stored either among the rafters of the lower terrace, under a painted ceiling, or below the floor of the upper terrace, perhaps in a sunken receptacle made of bricks, like the stone *κασέλλες* let into the floors of Knossian galleries.

FIG. 45.—MINOTAUR TYPES ON CLAY SEALINGS FROM HOUSE A. (Enlarged 1 diameter.)

Room **8**, the last and largest, has a floor of hammered white earth, on which rested in various stages of ruin five large jars ornamented with degraded rope mouldings, nine small rustic amphorae of the "pinched mouth" class, and (in the north-east corner) thirteen rustic handleless cups of the common Mycenaean type, turned bottom upwards. All were empty.

To north of this building soundings showed an artificial filling of stones. The rock slopes upward to the surface after a few feet, and, as has been already said, lies high above the building on the east, bearing the stone foundations of other buildings apparently connected with the lower one. To south I dug out stone cellar-like chambers (B. 1. 2. 3) precisely similar to A. 1. and 2. The massive returning south wall of A seems to mark them off as distinct, but they must be cellars of the same upper building. Some unpainted vases were found in fragments in the earth floor of 3 at a depth of five feet.

[1] These will form the subject of a special article to appear in the *Journal of Hellenic Studies*.

I have dealt in detail with this building A, albeit very small, because it is perhaps the most significant domestic structure yet uncovered on an Aegean site. It has been left open and walled off. It represents, however, evidently only the fore part of a perished group of buildings mostly situated on the upper level, which is the crown of the spur. The size and situation of this group, in which alone among the buildings on this site fine glazed pottery and such objects as tablets and sealings were discovered, suggests that it was the residence of the local chieftain, or governor. The fore part (A) I conjecture to have had an open terrace roof. Behind this rose the main building, with which the cellars A. 1. 2. and B. 1. 2. 3, and the stairway carried up through A. 3. 5. 6 communicated. What the plan of that main building was cannot be determined from its own denuded remains, but some idea of it may be gathered from the two large upper houses (G and I) afterwards excavated.

§ 5.—HOUSES C. D. E. F. H. K. AND M.

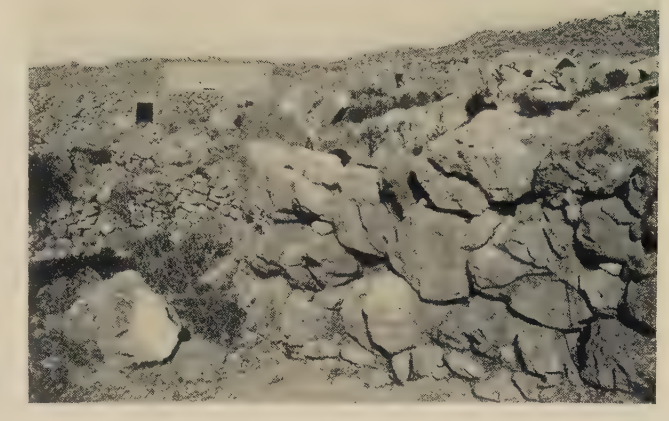
Before describing these houses, however, I will mention briefly a number of other buildings. On the general plan (Plate III.) a number of tetragonal structures are represented, mostly lying on the crown of the spur to south-eastward, but not lettered. These were all tested but found to be denuded to (and in places below) their foundations. The party walls and doorways could no longer be distinguished. The square, marked C, is in similar case but within its south-east angle a cellar had been sunk one metre into the rock, on the floor of which was a small heap of bronze implements (Fig. 46). This hoard consisted of two solid axes, laid side by side. On one hand were five thin plates with rounded ends, four of which were found adhering in pairs. They show no perforation or other signs of having been attached, but have a finely serrated edge. Under these lay three lances or knife-blades, one with six gold-plated studs of attachment. On the other hand of the axes were a number of fragments, apparently remains of the sides, handle and feet of a large cauldron. Under and about the bronzes was a good deal of broken painted pottery, many small cups and a rude stone trough. On the surface of the soil above this cellar a three-sided steatite lentoid of poor and late work was picked up.

At the foot of the slope I explored a succession of buildings marked D. E. F. and M. on the map. The depth of earth in these was consider-

1.

SPONGE BOATS, BOUND FOR AFRICA, LYING AT ZAKRO.

2.



CYCLOPEAN TOWER ON THE WESTERN SPUR.

3.

S.W. OUTER CORNER OF HOUSE A.

Pillar. ↓ 4. ↓ Basins.

INTERIOR OF HOUSE A. FROM THE N.W.

[*Face p.* 134.

able, and raised hopes not realised by their character or contents. The group of chambers D. E. belongs evidently to the fore part of a building on a higher level to east, which has almost wholly disappeared. The only entrance from the outer air seems to be in the north part of E, which is preserved to an average height of 2·6 inches only. This door gives access to a hall (**4**) at the farther side of which was a group of four basins, resembling those in A. A room (**5**), paved with concrete, opens to left, but its south wall has entirely gone. To right a stairway, of which four steps are preserved, ascends to the upper terrace (Plate V. 1). Perhaps it was continued by a wooden ladder placed in the narrow chamber at

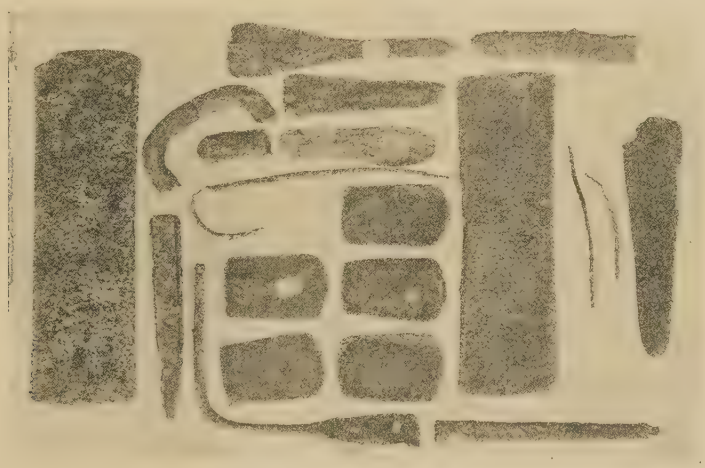


FIG. 46.—BRONZE HOARD FROM HOUSE C (1 : 4).

its head. Seven well preserved *πίθοι* (one of which had its stone cover intact upon it) distinguished the last chamber on the right (**1**), but nothing else worth mention was found in E. except two bronze lids on the floor of the entrance hall. For the sake, however, of the stairway, I left this group of chambers open. Its ruin was not, apparently, due to fire but to natural decay.

The chambers lettered D. have no approach from E. and none from the west or south. Their walls, preserved to an average height of five feet, were found unplastered, and their floors unpaved with anything but hammered earth. The deposit in these rooms was full of bricks, brick earth, and carbonised matter. The rough stone foundation of a square

central pillar alone distinguishes the largest room, from which a second chamber is reached by three rude steps averaging four inches high. In neither room was anything of interest found, hardly even a fragment of painted pottery. The third room was evidently (what the others were probably) a mere cellar. It contained much broken pottery of the commoner rustic sort (tripods, cups, &c.) lying in a heap at the lower end of its floor, and in a hole of the rock at its upper end occurred a small deposit of painted Kamares sherds. The whole group of chambers must have been approached by stairs from the ruined eastern upper house of which they were appendages. Perhaps the narrow recesses, which run into the rock eastward from D. 1, contained wooden ladders. In the northern of these recesses a long vase in coarse unpainted ware four feet four inches high with a diameter of only seven inches was found upright, half engaged in the wall. The bottom was pierced, and it had two handles midway.

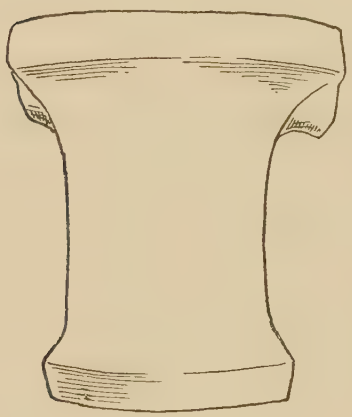


FIG. 47.—"ALTAR" FROM HOUSE M. (1 : 5)

The three chambers to north of this group (F) were cellars, filled with brick earth fallen from above, mixed with kitchen pottery only, and some fragments of bronze. They belonged to a large building of which very faint traces remain to eastward. In the level bottom of the ravine, immediately south-west of D, exist scanty remains of another group of chambers (M.) preserved to a height of two feet only. In a trial here I found the altar (?) (Fig. 47).

A number of trials to eastward showed that nothing was preserved but the large house I and two fragments of upper houses on either side of it (H. and K.), whose brick party walls remained to a height of about one foot at their eastern ends, where sheltered under the talus fallen from the crown of the spur above. Too little was left of either to make these structures informing, but each contained remains of a rubbish heap from which certain objects of some interest were extracted. In a chamber in H, were found a round worked stone, inscribed with six dots on one side and a symbol on the other ⁘ ⧈, evidently a weight, a perfect "blossom" vase in steatite and a small painted clay bowl of late Mycenaean type. In the central

passage was an extraordinary heap of rustic pottery just under the surface. In K were found a large coarse amphora of unusual squat form ; fragments of a painted filler, and of a vase with "embossed" surface, a degradation of the Kamares "finger work"; the knob from a knife-hilt in striped blue-grey agate, and a head of a wild goat in greenish clay with yellow slip.

Two large houses, G. and I., lying almost on the ridge of the spur, deserve more detailed consideration. Having very massive Cyclopean outer walls they had retained earth and been for many ages fenced off as cultivation plots.

§ 6.—HOUSE G.

The Cyclopean south-west wall of G, immediately behind, and roughly in a line with, the group D. E., is the most imposing ruin on the site, the outer face rising 15 feet from the foundations at the north-west corner.

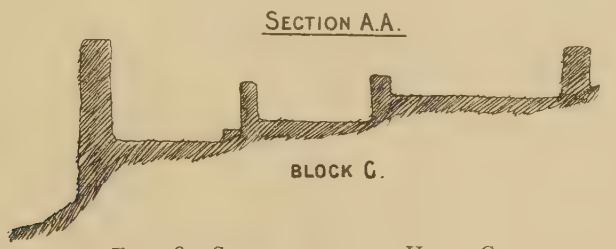


FIG. 48.—SECTION THROUGH HOUSE G.

This height however is largely due to its being a retaining wall : the drop on the inner side to the lowest floor level of the house itself, in room **4**, is only 8 feet. The largest blocks of which this wall is composed average 4 feet × 3 × 2·6, and there is very little filling in of small stones. The other outer walls are of the same character, but lessen in height with the rise of the hill, till of the north-eastern only a single course remains. (*v.* Section AA).

This house was unfortunately in the last stage of ruin, and its plan was only to be imperfectly traced. Nothing but the substructures or cellars at the back (the south-west) had more than two feet of earth in them, or walls preserved above their foundation courses. Consequently hardly any objects were recovered from this house beyond broken pottery : but that

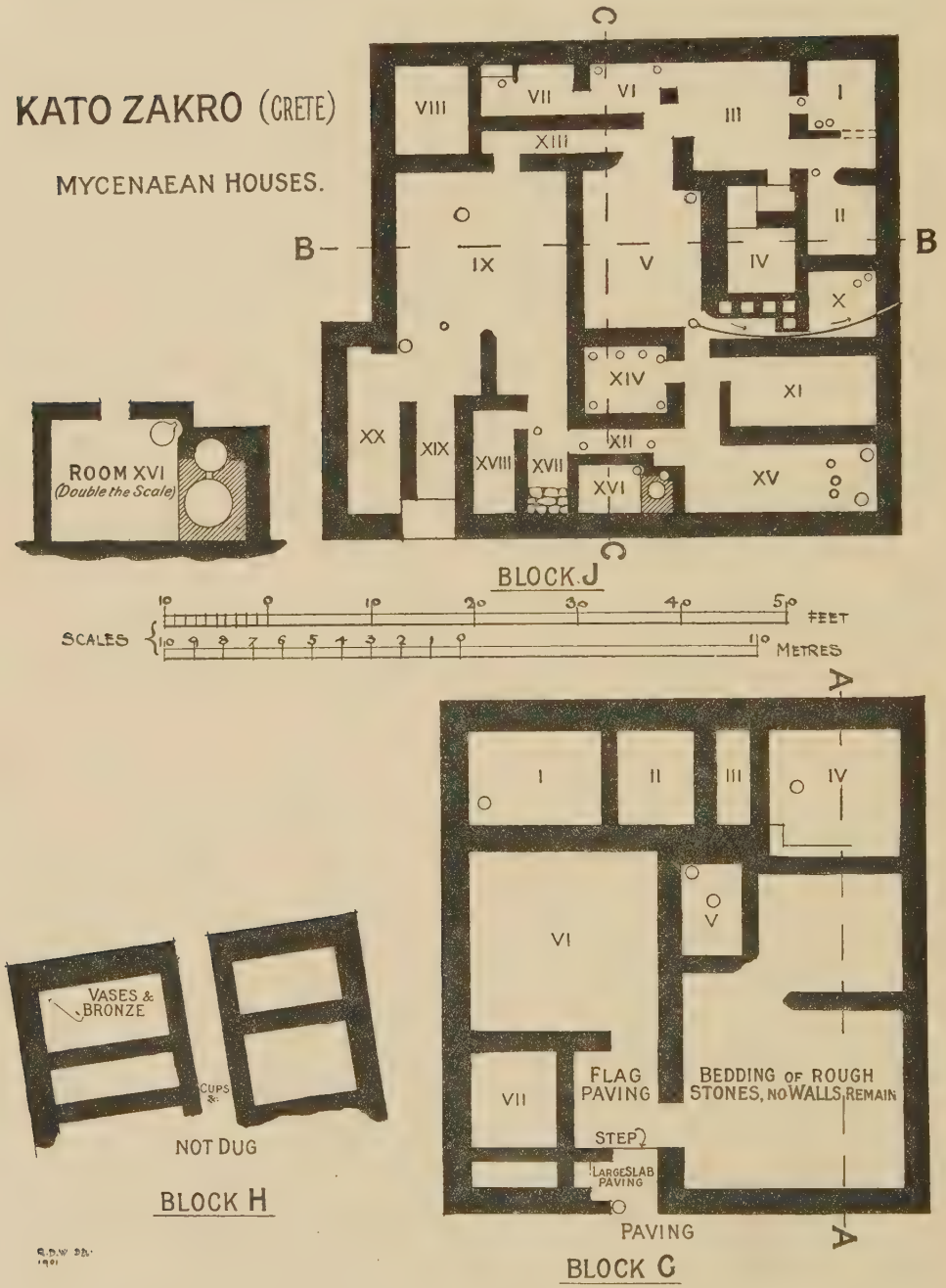

KATO ZAKRO (CRETE)
MYCENAEAN HOUSES.
C
B
B
C
VIII
VII
VI
III
I
XIII
II
IX
V
IV
X
XIV
XI
XX
XIX
XVIII
XVII
XII
XVI
XV
ROOM XVI
(Double the Scale)
BLOCK J
SCALES
FEET
METRES
A
A
I
II
III
IV
V
VI
VII
FLAG PAVING
BEDDING OF ROUGH STONES, NO WALLS REMAIN
STEP
LARGE SLAB PAVING
PAVING
BLOCK G
VASES & BRONZE
CUPS &c.
NOT DUG
BLOCK H

FIG. C.

was of a kind to show that, in the latest Mycenaean age, the inhabitants maintained a certain luxury. Alone among the Zakro houses, this contained evidence of having possessed painted *πίθοι*: large conventionalised polyps sprawl in matt red over a yellow ground, or their bands of incised and moulded ornament are relieved by crimson stripes.

The house was entered (*v.* plan) by a wide doorway from a roadway running from north-east to south-west along the high ground to north. In this doorway on the left is a small round column base (1 ft. diam.) *in situ*. The door led into a small paved vestibule provided with a low stone bench 10 in. high along the left hand wall. From this a step of 4 inches descended to a second and larger paved vestibule, whence opened immediately on the right a doorway of the same width (4·8) as the vestibule entrances, conducting into what seems to have been an inner open court-yard. The rock over all its area is but very roughly levelled and seems to have been rudely paved with round stones. Here were found remains of larger *πίθοι* which must have stood about 5 feet high. (*v.* sketch, Fig. 49, of entrance hall from the inside).

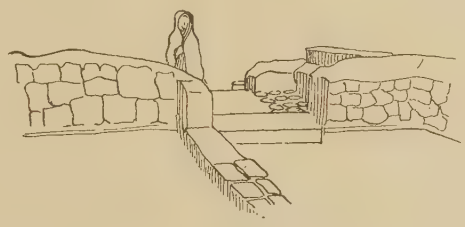


FIG. 49.—SKETCH OF ENTRANCE TO HOUSE G. FROM WITHIN.

Returning to the inner vestibule we see on the left two small chambers denuded to the foundations; it is impossible to say where their doors were. To south-west, however, a second low step leads into the main hall of the house, a perfect square, 17 feet × 17 feet (**6**). Nothing remains of it but foundation courses, and rock was found at only 1 ft. 6 in. below the surface of the soil. All trace even of pavement had vanished; but from ashlar blocks lying in the deposit it is plain that its walls had been in part of good masonry. Probably above a certain height they were continued in brick. One block bore the incised signs

To south and west of this hall the vanished chambers of the house stood over a basement, which survives as a series of doorless cellars about 5 feet deep. Two ashlar blocks remained in position on the rough wall which divides cellars **3** and **5**, to attest the character of the upper structure. Cellar No. **1** has a rough rock floor and inner walls of small unplastered masonry. A *πίθος* was found in position, and the deposit contained fallen bricks, many fragments of painted ware, four bronze fish-hooks, a bronze ring, and a flake of obsidian. Cellar No. **2** yielded a "hole-mouth" vase of late Mycenaean buff glaze with red-brown "splash paint" ornament. No. **3**, a mere slit, was empty. No. **4** can claim to have been more than a cellar, being paved with pebble concrete in which a *πίθος* has been sunk 2 ft. 6 in. to its rim. Round the south-east angle runs a bench 1 foot high and 1 ft. broad composed of ashlar blocks with ends "splayed," so as to leave joints opening trianglewise. This is precisely parallel to the bench in House *B* at Knossos, figured in *B.S.A.* vi. (Plate IV. 4). Cellar **5** contained two *πίθοι* and six pear-shaped pierced "weights." The space to north-west of this seems to have contained a sixth cellar of larger dimensions, but now utterly ruined. From it were obtained a tiny *Bügelkanne*, a bronze blade, and a fragment of a twisted column of steatite. This house, unlike A., D., or E., is obviously a self-contained whole, not a mere forepart. The imperfection of its plan, however, makes it a less valuable discovery than the large house to eastward (I.).

§ 7.—HOUSE I.

Well-preserved Cyclopean walls on three sides (W., S. and E.), and brick earth within their area marked a likely spot. In the event, the space so enclosed proved to contain the most elaborate and complete ground plan discovered, and a greater number of objects (*e.g.*, over 70 vases) than any other house. Unfortunately the deposit was shallow, averaging under 3 feet, and the rooms and their contents, though not calcined by any conflagration, were in ruinous condition. The feature of this building was the preservation of its fine pebble concrete floors, and wall plaster. I had all the rooms cleared by knife-work, and the edges of plaster very carefully followed. By those edges in certain cases the position of walls, that have themselves vanished, was determined (Fig. 50).

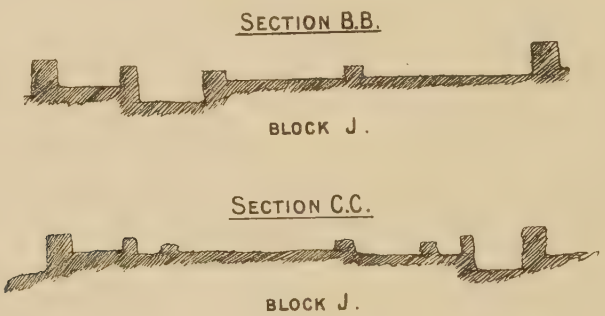


FIG. 50.—SECTIONS THROUGH HOUSE I.

This house, like that last described, is a self-contained whole. It is entered from the higher, *i.e.* the north side, by an accurately squared doorway with a massive threshold block 5′ 6″ × 4′ 6″ × 6″. The wall is at its highest at this point, rising west of the entrance to 4′ 10″ in three courses; on the east in two courses to 3′ 6″. Originally this entrance was in the extreme N.E. angle of the house, but at some period part of the east wall was pulled down and thrown out to eastward, making a chamber (xx.) on the left. A brick wall was then built to form a west side, the end of which now obscures a corner of the threshold block.

The vestibule (xix.), originally paved with stone, gives access to a large Court (ix.), apparently unpaved and unplastered. Much brick ruin, two large πίθοι and some fragments of stone vessels were found in its area. On its south side, and also on the north, are doorways by which the main rooms are reached. Beyond the northern doorway a stone built room (xviii.), found empty, is passed, and certain well-preserved structures are reached on the right which seem to hang together. The centre of the group is the plastered room or cistern No. xvi. The thin inner walls of this (1′ thick) are plastered inside and out and on the top, and they still remain at their original height (2′ 3″). The floor is equally plastered, and the narrow door (1′ 4″) does not go down more than half-way to the floor. The room could thus be filled with water or other fluid to a depth of 1′ 2″ (*v.* Section

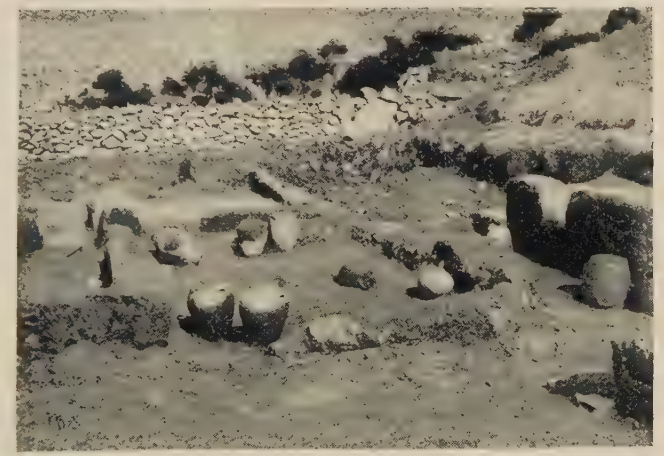
1.

House E. from the N.W. showing Stairway.

2.

House I. from the W. showing Room XVI. with adjoining Basins.

3.



House I. from the S.E. showing Vases as found in Room XIV. Room XVI. to Right.

4.

House I. The "Kitchen" and Drain from Room XI.

[*Face p.* 141.

CC). In the south-west corner is a slight recess, where a clay receptacle, 1′ 3″ diameter, is sunk to its rim in the floor. On the west the wall broadens out as a platform of stones and clay with a step on south and west, and in this are sunk, one below the other, two large basins, whereof the upper, 2′ 3″ diameter, but only 7″ deep, drains (as in A) through a wide vent to the lower (1′ 5½″ diameter by 2′ 2″ deep). (Plate V. 2). On the east is a lower platform of stones (xvii.). What purpose was served by this group of cisterns and basins? That of a bath? or that of a wine press? Native opinion inclined to the latter, and perhaps with that view the shallowness of the cistern, and the receptacle sunk in its angle, are most consistent. If this view be adopted, we must see the same purpose in the arrangement of tank and basin in the entrance hall of House A.

Two chambers are now passed on the right, of which one (xv.) has no pavement, and may be judged from the remains of large πίθοι found in it, to have been a store. The other (xi.) has its party walls preserved to inches only. Two small plain jugs were found in it. On the left, opens a room (xiv.) which yielded a great quantity of the commoner sort of vases, stamni, cups and small jugs. A unique vessel in very rough unpainted ware, shaped like a six-inch gun shell, and pierced at the point, is figured below (Fig. 51). I have no clue to its use. Seven amphorae were ranged round its walls, each corner being occupied, and in the middle among masses of ashes and burnt bones occurred about twenty pierced stones and several pierced clay weights (Plate V. 3). A doorway now gives access to the central and largest room of the house (v.) finely floored with concrete and plastered with a stucco, blue in its lower part, but evidently, (from fragments), varied with red in its upper. It was terribly ruined and quite empty, except for a πίθος in the south-west corner. Right of its entrance is a narrow chamber supplied with five plastered kitchen troughs raised on a step 7 inches high (Plate V. 4). The surface water from chamber v. was carried off by means of an open channel of baked red clay, 1 inch wide by 1 inch deep, over the floor of the adjoining room (x.) and through a hole in the west Cyclopean wall. Room x. contained two πίθοι *in situ* and a broken painted *oenochoe* inside one of these.

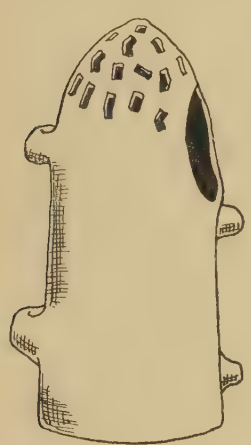


FIG. 51.—VASE FROM HOUSE I. ROOM XIV.

Passing out of the central hall by its south door we are confronted by a base made of bricks, 1′ 3″ × 1′ 3″ × 4″ (the ordinary size of bricks in this house), standing in a much ruined room (iii.) whose north wall could be traced by the line of its plaster face only. This room was empty, but it gave access to another sunk chamber (iv.)with plastered walls and paved floor (*v.* section BB.). Its arrangement recalls the so-called "sunken tanks" of Knossos and Phaestos. On its pavement in the north-east corner lay a mass of vases, mostly of common type (plain cups and one-handled bowls), in one of which was found a thin silver lid of 137 mill. diameter. Other vases, two heavy stone lids, and a bronze knife-blade were found on the upper step.

Retracing our steps, we leave on the right a small chamber (ii.) with vestibule, which contained a painted stamnos and a painted bowl, and enter the corner room (i.), which was one of the best preserved in the house. Its brick party walls rest on stone foundations, and were found covered with a bluish plaster, fallen fragments of which showed traces of a red leaf pattern. In its north-east angle was a small perfect πίθος and a large basin, and in all corners and in the centre were found broken vases to the number of a dozen, together with two bronze pins, and a mug in reddish marble.

Returning eastward, we pass by a step from room vi. to room vii. in the far corner of which were remains of a receptacle made of upright slabs, and of a number of vases, including two pseudamphorae of late type. Room viii. beyond this, which is sunk to 5′ 3″ below the general level, is stone built, has no door or pavement, and is evidently a cellar. The passage xiii. was found blocked

with common "rustic" vases to the number of 35, and pierced clay "weights." By this passage the open court (ix.) is again reached, and the circuit completed.

Here we have the most complete ground plan on the site, and a fair type of a house of the latest Mycenaean age. The painted ware found in it was uniformly of that period in decoration and form. Bronze occurred, but not a trace of iron. Its destruction marked the close of the Mycenaean period, and the abandonment of the town. No painted geometric ware occurs anywhere on the surface of the Kato Zakro basin. To find that one must go towards the upper valley.

§ 8.—BURIALS.

Tombs were sought in vain on all the slopes of the hills. My overseer, Gregori Antoniou of Larnaca, one of the most experienced tomb-finders in the Levant, was of opinion from the first that burial in chamber graves could never have been habitual here, since the limestone rock is uniformly of the most uncompromising hardness. In the event his view was justified, for the rock shows no sign of having been cut at any point, except in the quarry at Spílaios Pelekitoú, two miles to northward on the seaward face of the cliff, from which the materials for the Zakro town doubtless came. Nor have the denuding influences of nature left sufficient earth to cover a corpse anywhere, but in the marshy delta of the river, a very unlikely place.

Where then did the folk of the earlier and later Zakro settlement lay their dead? Native tradition reported former discoveries of built cist-graves in rock recesses and caves of the Gorge, and I was conducted to two grottoes, now bare of earth, but still containing bones lying among rough slabs, evidently the ruins of such cists. Thereafter I had the caves systematically examined. Those visible from the lower plain proved all water swept, except one small recess high up on the north, and east of a much larger and more conspicuous grotto. This contained about a foot of earth from which several potsherds were collected, but no bones. These sherds were a surprise, for many of them belonged to early styles distinct from any found below. Together with parts of rough vases with white ornament on a black "Kamares" slip were three other kinds, (1) hand-polished brown-black neolithic, (2) ware of a blue grey clay with slip of the same, ornamented with very regular incised geometric schemes, (3) a yellow

ware bearing hatched ornament in brown lustreless paint, strongly recalling a fabric found in the primitive necropolis of Agia Paraskevé in Cyprus (Fig. 52, cf. middle vase first row). All this seems to date before the developed Kamares-Mycenaean pottery of the Pits.

Scanty remains of small terraced houses were found on the steep slope just below the cave, and before the mouth of the latter there were traces of a rectangular structure: but the few sherds recoverable from these houses were of later Mycenaean type.

A much larger cave, however, about three miles up the Gorge, threw some light. This lies high up on the left bank, not far below the point where the stream from Epáno Zakro first engages itself in the cañon. The cave was found to be choked with earth and animal droppings; and clearing a way in, we hit almost in the entrance on the disturbed remains of at least five burials, laid about two feet from the surface under a stratum of fine ash. The bodies had been laid on earth within cists rudely built of small stones, but only one of these retained its form. Its inner area measured 3′ 10″ × 2′ 8″, and it contained a well-preserved skeleton, laid on the left side, with knees drawn tightly up towards the chin, and arms extended at full length. A single vase in grey clay with incised geometric ornament lay with its mouth almost touching the mouth of the corpse (Fig. 52, middle vase of second row).

The other four burials, lying more towards the south of the passage, were a jumble of stones, skulls, vases and bones. From the confusion I recovered two skulls, two obsidian flakes, a bone object pierced with bronze nails which was perhaps a knife handle, twenty-three vases complete, or nearly so, a basket of fragments, and a pierced clay cube or "loom-weight." Of these vases, five are typical early *Schnabelkannen*, unpainted and hand-made; three are bowls in the incised grey-black ware noted in the lower cave; one large *Schnabelkanne* and a saucer are in the yellow ware with brown painted ornament, also found in the lower cave; one bowl, with small suspensory handle under the lip, is in a highly polished hand-made ware varying from bright red above to black at the base, very like a Cyprian fabric; five are jugs and bowls in plain hand-made buff ware; one cup shows neat white hatched ornament painted under the rim on the body clay: a second is of a typical Kamares shape with black slip; a third in the same ware has spout and rudimentary handles; and one small black polished bowl is strongly reminiscent of squat

suspensory neolithic bowls. They form a group whose relative date is clear (Fig. 52). The burials to which these vases belong must be placed in the beginning of the "Kamares" period, of whose typical pottery they embrace certain specimens; but they contain also elements not usually found on "Kamares" sites. The neolithic incised ware seems to have taken here a geometric development both in incision and in paint, without adopting the typical "Kamares" glaze. The impression conveyed by these vases is of native post-neolithic fabrics, with Kamares importations and influences appearing among them.

FIG. 52.—TYPICAL VASE FORMS FROM EARLY CAVE BURIALS.

Further exploration of this cave proved fruitless. It must have been blocked and the burials must have been disturbed at a very early period. Some fragments of painted Mycenaean ware occurred in its superficial earth.

It is plain, then, that cave burial was practised at the time of the early Kato Zakro settlement, and it is probable that the dead continued to be disposed of in superficial cists among the rocks of the numerous gorges

through the Mycenaean age. Such a practice, which in nine cases out of ten would expose the body and its grave furniture to the terrific denuding influences which act on Cretan soil, may be held to explain the extreme difficulty experienced hitherto in finding early cemeteries in the island. Probably for the most part they have absolutely ceased to exist.

Cave burial was certainly still in vogue in the post-Mycenaean Geometric period. A considerable site of that period exists at "*Hellenika*," (summarily described by Mariani, *l. c.*) about a quarter of a mile from the cave just described, down the course of the stream. Here are ruined houses built of small stones, disposed over a steep slope right in the heart of the gorge. This unusual situation, hot, beset with flies and remote from the arable lands, must have been chosen under pressure of great danger. The security which encouraged a settlement at Kato Zakro prevailed no longer. Just above this site is a small cave very difficult of access. Within it the rock has been cut to form a trench $6' \times 4'$, where, along with disturbed human bones and remains of a cist, I found five painted vases of ordinary late geometric types, a large tripod cooking pot and parts of a necklace of blue Egyptian paste beads. Another half mile down the gorge are two caves high up on the right bank. In one of these was an immense collection of disturbed bones, with fragments of late geometric ware.

§ 9.—KATO ZAKRO AS A WHOLE.

I have stated that above the floors of the houses at Kato Zakro no "Kamares" ware at all was found, but a few fragments occurred in three places under foundations. Nor did any specimens of that "Mycenaean" ware, so characteristic of the Pits, which continues *Kamares* schemes of ornament, occur in the lower town. In fact the pottery on the two hills is quite distinct. That on the lower hill is almost exclusively characterised by the inferior glaze and debased ornament which we associate with the late efforts of Mycenaean art in the Aegean; but with it were found a few rare examples of the finer wares, classed by Furtwängler and Löschke as the "third and fourth styles." These might well be survivals—heirlooms still in use, or preserved for show.

The seal impressions form a gallery of Mycenaean art of the good period. A few specimens show a premonition of the dry late style, but the majority are earlier. The finer specimens recall more than

anything else the art of Vaphio, while some types have intimate relation with the Acropolis graves at Mycenae, and still more intimate relations with types found in the Palace at Knossos.

However late in the Mycenaean Age we place the existing remains of the Lower Town of Zakro, *these were still anterior to the Age of Iron.* Not a trace of that metal occurred in or by the houses, while bronze was abundant, and obsidian flakes were also found. Nor were any fragments observed of distinctly geometric vases. Like the similar trading settlement on the Gulf of Mirabello, discovered at Gournia by Miss Harriet Boyd, most of what is left at Zakro seems to belong to an epoch towards the close of the Bronze Age. The fact that the remains at both sites come to a clean and abrupt finish with that epoch, showing no admixture of remains of the succeeding epoch, is in favour of those who hold that the use of iron and the inception of the geometric style resulted from some violent and radical social change in the Aegean, such as conquest by a distinct race. With that event, of whatever nature it was, population deserted the Zakro plain. The seafaring commerce, which had been the cause of its importance, was diverted elsewhere, or perhaps, as other evidence tends to show, it ceased altogether.

If it ended thus, *how did the Zakro settlement come into being?* The complete failure of the neolithic and earlier "Kamares" remains on the town site seems to indicate that civilisation did not develop from the most primitive period on the spot, as it did at Knossos, but was planted at Zakro ready made just before (or just at the opening of) the Mycenaean Age properly so-called. Potters with the tradition of the pre-Mycenaean style and potters equipped with the new style seem to have come in almost, if not quite, together. It is hardly going too far to see in this settlement a mixed colony compounded of pre-Mycenaean and newly-come "Mycenaean" elements of population, established at this remote spot to conduct trade with Libya. But *established whence and by whom?* To the solution of this question Mr. Bosanquet's negative evidence obtained at Praesos is pertinent. He found that both "Kamares" and "Mycenaean" pottery failed absolutely in the centre of the Eteocretan country. The result of my own researches in the Upper Zakro district showed that the same was true there. On leaving the coastal plains, whether at Zakro, Palaiókastro Petrá, or Gournia, one seems to leave the Pan-Aegean civilisation behind and to enter on the domain of a people whose development had been

independent, but whose rude native art came to be considerably influenced as time went on by the greater art of the "Mycenaean" coast settlements. Their native products seem to be represented, during the "Kamares" period, by the contents of the cist-graves which I found in the caves.

These graves (from which I obtained some skulls (v. *infra* p. 151)) appear to belong to a native race which was in communication with the Kamares and Mycenaean culture of the coast settlements, but to which that culture was foreign. This race, then, cannot be supposed to have founded those settlements, and the town at Lower Zakro must have owed its origin to colonists brought in ships, probably from mid-Crete. In short, it was in all likelihood an outlying trading station of the Minoan power at Knossos.

Its position indicates that Zakro traded with Libya direct, and not (as has been supposed) by a circuitous route through Rhodes and Cyprus. But in actual evidence of such trade the finds, made in the plain, are disappointing. One fragment of porcelain was the only Egyptian object turned up; a vase with moon and sun disk in relief on its side recalls Phoenicia; two others are probably of Cyprian fabric.

§ 10.—REMAINS ABOUT EPÁNO ZAKRO.

The sites in the upper Zakro Valley, which I tested, are as follows:

(1) *Xerokambólina* lies at the foot of the subsidiary range, half-way between upper and lower Zakro. Very scanty traces remain of a village with painted sherds of late Mycenaean types.

(2) *Ambélis*, about two miles south of the above, overlooks the plain of Kato Zakro from the west. There are three groups of megalithic houses, near one of which is an ancient threshing floor. The potsherds found in my trial pits were Mycenaean, but there was not sufficient earth in any house to make it worth while to continue excavation. These houses are evidently farmsteads related to the small plain which now supports a metóchi. Not far from these lies another similar megalithic farmstead at *Chirómandres* ("Sirómadres", Evans, *Academy*, *l.c.*), on the path from upper Zakro to Xerokambos, one hour from the former.

(3) *Anthropolítes* ("Athropolitous," Evans, who includes under this name also No. 4), is a barren hill about a mile to the south of upper Zakro. Very faint traces of a late settlement are visible.

(4) *Tou Koukou to Kephάli* is a hill immediately south of the village of upper Zakro. This much denuded site has been of some importance and Mr. Evans, on his visit, thought well of it, but it proved on being probed to retain almost no earth. Terra-cotta animals and plaques with archaic "Apollo" reliefs, together with painted geometric ware, have been found here. My overseer picked up a geometric lentoid gem on the surface. The foundations of a considerable building in the smaller and regular megalithic style exist on the south-west slope of the hill, and on an opposite hill (*Vigles Skouláza*) are similar remains of a building 50′ × 54′, too devoid of earth to be worth digging.

To eastward, across the river, I explored two cave-graves pertaining doubtless to this site. Both had been robbed of valuables, but one (A) still contained nearly 70 clay vases, a number of bronze fibulae with heavy embossed bows, and some bronze pins, beads in glass and incised clay, a good deal of iron, including a typical geometric sword-hilt, 3 stone vases, a steatite lid, and 3 clay whorls. The vases are of the types already rendered familiar by discoveries at Knossos and Kavúsi; the ornament is geometric with Mycenaean reminiscence. The tomb is rudely arched in the rock and is probably a natural recess about 6′ × 6′; it showed no signs of shaping or levelling.

The second tomb (B), to left of this, had walls built outwards from the rock to form an oblong 5′ × 3′. It contained some 15 vases, all but one in coarse gritty clay and unpainted. The exception was a small jug painted in red brown on a yellow slip. All the vases are of ordinary geometric types.

(5) The ground about the "Inner Mill" above the village is strewn with sherds of the same period, and finds of geometric gems are reported to have been made there.

(6) *S' tas Tavérnas*, 1½ miles north of the village and close to the metóchi of Klisidi, lies a little to right of the direct path to Palaiokastro. This site was first seen by Halbherr and recommended for excavation. Mariani subsequently planned and described it very fully, but overestimated its importance. The actual remains consist of foundations of a village, containing one house or farm of unusual size, which measures 63′ 7″ × 64′ 9″. Its outer walls are constructed in well squared blocks. Unfortunately this structure is denuded internally to its foundation clay, and the only evidences of its period that I could recover were a small

plain wheel-made cup, and part of a πίθος with incised ornament, more probably post-Mycenaean than earlier, and two bits of much perished painted ware, apparently also of the Geometric period.

A similar megalithic farmstead exists about one mile to S.E. of the last named, partly inside partly outside a modern inclosure known as *Skaphe Vakliás*. It is on the direct road leading from Kato Zakro, by the left bank of the Gorge, to Azokéramo. This farm is also denuded to its foundations, but in style of construction is one with *S' tas Tavernas* and the remains on and near *Tou Koukou to Kepháli*.

SKULLS FROM CAVE BURIALS AT ZAKRO.

By W. Boyd Dawkins.

I.—Description.

The human remains discovered by Mr. Hogarth in the caves of the Zakro Gorge, and sent to me for identification, consist of three skulls of adults and a fragment of an upper maxillary of a child. The skulls present the following characters. All are well developed, with highly complicated sutures, and wormean bones in the parieto-occipital suture, with thin cranial walls, and without the strong muscular impressions and ridges, usually met with in prehistoric skulls, and present in all living uncivilised peoples.

Skull No. 1, figured in the Plate, lay in the only untouched cist found by Mr. Hogarth in the caves (*v. supra*, p. 143), together with the incised vase shown in the middle of the second row in Fig. 52. From its delicacy it is probably that of a woman. The forehead is well developed, with insignificant glabella, and slight supraciliary ridges (A). The inter-orbital region is flat and broad. The orbits, as may be seen from Table I., are mesoseme and rounded-rectangular, and droop outwardly. The vertical profile of the nasals is slightly concave, and the nasal aperture is leptorhine-mesorhine, the index being ·480 on the line of division between the two groups.[1] The alveolar index of ·900 proves that the lower portion of the face was orthognathous, or 80 below the highest figure in the division. The alveolar border is slightly concave in the median line, with slightly projecting incisors. The outline of the palate is parabolic, and the two last molars are gone, leaving a bare filled up space. The regular outline of the skull, with its sides gradually narrowing from back to front, is clearly shown in C, as well as the flattening of the parietals behind the fronto-parietal suture. This flattening may be due to the pressure of a handkerchief worn over the head while the skull was growing.

[1] Flower, *Osteological Catalogue of Mus. Coll. Surg. Lond.*, Part 1, 1879, p. 252.

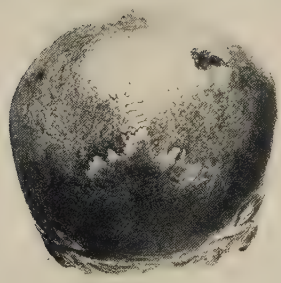
Plate VI.

A.

B.

C.

D.



SKULL FROM UNTOUCHED CIST AT ZAKRO.

[*Face p.* 150.

The antero-posterior curve (B) is flattened in the posterior region of the frontals and the anterior region of the parietals. It then sweeps in a bold curve over the occipitals to the basion. The transverse arc (D) is flatly pointed close behind the fronto-parietal suture.

The cranial or breadth index of ·752 proves that this skull belongs to the long or dolichocephalic as it passes into the oval type. Passing over skull No. 2, which is too fragmentary and decomposed for purposes of comparison, skull No. 3, adult, and probably male, repeats the principal characters of No. 1. It is long, orthognathous, and leptorhine. It has, however, thicker cranial walls, and stronger muscular impressions, the glabella and the supraciliary ridges being strongly marked. It is also slightly longer, the cranial index being ·740. The nasals are convexo-concave in profile, and the lower portion of the nasal cavity is round. The outline of the palate is parabolic. The lower jaw belonging to this skull implies square chin, and the nasio-mental height is 105 mm.

These three skulls obviously belong to the long-headed section of the ancient inhabitants of Crete, and they all bear the marks of civilisation in the absence of strong muscular ridges and impressions, and in the small size of the teeth. The lower jaw of No. 3 skull bears marks of an abscess. It is remarkable for the small size of the canines, for the gap in the alveolar border occupied by the second true molar which had been lost, and for the decay of the last molar—or "wisdom tooth." All these characters point unmistakably to the fact that the possessors of the skulls had left the feral condition of humanity behind, and led the artificial life of highly civilised peoples.

2.—COMPARISON WITH OTHER ANCIENT MEDITERRANEAN CRANIA.

If these skulls be compared with those described by Virchow, Garson, and others, from various localities in the Mediterranean region, it will be seen that they fall naturally into line with the long skulls of Greek and pre-Greek peoples, in Asia Minor, in Attica, and in Italy. In the first Table I have given the measurements of the three skulls from the Cretan tombs, side by side with those from Hissarlik, Menidi, and Cumae. I have added also those described by Virchow from the mound of Hanai Tepeh, in the Troad.

TABLE I.—SKULL MEASUREMENTS.

	Cists near Zakro, Crete.			Hissarlik [1]			Menidi.[2]	Cumae.[3]	Hanai Tepeh.[1]												
	I F?	II F?	III M	2 M	3 M	5 F			B 1 F	A 1 M	A 2 F	A 3 F	A 4 F	A 5 F	A 6? F	A 7 M	A 8 M	A 10 M	A 16 M	A 17 M
1 Maximum length	178	—	189	195	191	188	187	188	179	195	184	177	182	179	185	188	186	187	186	188
2 Maximum breadth	134	135	140	132	142	134?	137	139	128	143	139	138	132	137	137	132	144	139	144·5	141
3 Minimum frontal width	92	104	90	90	99	—	99	—	91	101	95	89	83	93	96	92	94	95	92	95
4 Basio-bregmatic height	123	—	—	—	—	—	130	129	—	—	—	—	—	—	—	—	—	—	—	—
5 Horizontal circumference	504	—	—	521	537	505	512	525	492	—	510	—	—	—	—	508	525	—	530	518
6 Antero-posterior curve (basion to nasion)	366	—	—	—	—	—	367	—	—	—	—	—	—	—	—	—	—	—	—	—
A Frontal arc	126	—	130	—	—	—	125	—	—	—	—	—	—	—	—	—	—	—	—	—
B Parietal arc	114	—	120	—	—	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—
C Occipital arc	126	—	—	—	—	—	122	—	—	—	—	—	—	—	—	—	—	—	—	—
7 Basion to nasion	98	—	—	—	—	—	102	105	—	—	107	—	—	—	—	—	110	—	102	93
8 Basion to alveolar point	88	—	—	—	—	—	—	102	—	—	94	—	—	—	—	—	104	—	91	91
9 Bizygomatic breadth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10 Bigonial breadth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11 Nasio-mental length	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12 Nasion to alveolar point	60	—	63	—	—	—	—	—	—	—	68	—	—	—	—	69	—	—	75	64
13 Nasal height	50	—	46	49?	49	—	59	53	—	—	52?	—	—	—	—	—	—	—	55	48
14 Nasal breadth	24	—	22	23·5	25?	—	25	25	—	—	22?	—	—	—	—	—	—	—	24?	25
15 Orbital length	39	—	38	—	39	—	41	37	—	—	40	—	—	—	—	—	—	—	39	39
16 Orbital breadth	34	—	31	—	30	—	33	35	—	—	35?	—	—	—	—	—	—	—	34	34
Cranial or Breadth-index	·752	—	·740	·676	·745	·713	·733	·739	·715	·733	·755	·780	·725	·748	·741	·702	·774	·743	·776	·750
Height-index	·691	—	—	—	—	—	·695	·686	—	—	·723	·740	—	—	—	·697	·763	—	·790	·707
Alveolar-index	·900	—	·981[4]	—	—	—	—	·971	—	—	·878	—	—	—	—	—	·945	—	·892	·968
Nasal-index	·480	—	·478	·479	·510	—	·423	·472	—	—	·423?	—	—	—	—	·500	—	—	·436?	·520
Orbital-index	·871	—	·815	—	·769	—	·804	·867	—	—	·875?	—	—	—	—	·837	—	—	·871	·820

[1] Virchow, *Alttrojische Gräber und Schädel Abh. Kön. Akad. Wiss. Berl.* 1882, pp. 130–133.

[2] Virchow, *Kön. Akad. Wiss. Berl.* 1893.

[3] Garson, *Journ. Hell. Stud.* v. p. 59.

[4] Ear-hole to nasion 108, to alveolar point 106 mm. In No. 1 skull these measurements are 102 and 100, which give an alveolar index of ·991.

The skulls from Hissarlik were obtained from the "third city." The skull from Menidi, near Athens, was obtained from a domed grave, of well defined Mykenaean age,[1] while that from Cumae[2] is ancient Greek. The skulls from these localities form one well defined group, with a cranial index ranging from ·676 to ·752. In the Cretan skulls, Nos. I and III, the alveolar index is ·900 and ·981, and in that of Cumae ·971. They are therefore orthognathous. All with one exception, No. 3 from Hissarlik, which has a nasal index of ·510, are leptorhine. The orbital index ranges from ·804 to ·871, the Cretan skulls and that from Cumae being mesoseme, and those from Hissarlik and Menidi microseme.

The skulls from Hanai Tepeh are derived from a Greek settlement,[3] ranging over a considerable period and as late as the fifth century A.D., are of uncertain age, and are, as may be seen from the Table, partly long (dolichocephalic) and partly round (brachycephalic). They present a series of changes which are obviously the result of the fusion of the long-headed with the round-headed peoples.

In the preceding Table the measurements of two long skulls from the third city of Hissarlik have been given. A skull described by Virchow, found by Schliemann, in the second city (see Table II.), proves the presence of the round-headed race in the Troad, either before or at the time when the Achaeans were attacking the city. It has a cranial index of ·825, and is prognathous, contrasting in these two important characters with the long skulls of Table I. It stands in close relation to the group of skulls of Table II., from the mainland of Greece and the Aegaean area, which are characterised by their tendency towards roundness, their cranial indices being centered round, and being mostly above, ·800.

All the skulls in the above Table belong to the Mykenaean or to the first stage of the succeeding period. Those from Nauplia (Ridgeway, *op. cit.* p. 23) are associated with articles similar to those found in Mykenae; that from Spata was obtained from a domed tomb of the type of "the treasury of Atreus" (Ridgeway, *op. cit.* p. 30). To this age also belongs the skull from the cemetery of Antiparos, discovered by Theodore Bent (*Journ. Hell. Stud.* v. p. 48). Those from the Dipylon graves, near Athens, are proved by the pottery to be of post-Mykenaean age (Schuchhardt, *op. cit.* p. 129).

[1] Schuchhardt, *Schliemann's Excavations*, pp. 147, 151. Ridgeway, *Early Age of Greece*, vol. i. p. 30.

[2] Garson, *Journ. Hell. Stud.* vol. v. p. 58.

[3] Schuchhardt, *op. cit.* p. 87.

The skull from Mykenae is unfortunately too fragmentary to allow Virchow to accurately define its breadth. It is probably a round skull.

TABLE II.—MEASUREMENTS OF SKULLS.

	Hissarlik.[1]	Mykenae.[2]	Nauplia.[2]	Nauplia.[2]	Spata.[2]	Antiparos.[3]	Dipylon.[2]	Dipylon.[2]	Dipylon.[2]
	—	M	F	F	M	—	F ♀ 1	F ♀ 2	M ♂ 3
Length	180·5	194·5	170	174	178	178	174	173	170
Breadth	149	157?	135	138	144	144	143	150	133
Height	—	—	—	—	—	—	127	126	125
Circumference	522	—	495	500	510	510	499	513	485
Basion to nasion	—	—	94	95	95	101	98	97	96
Basion to alveolar point	—	—	92	86·5	91	88	88	88	91·5
Nasal length	48?	—	47·5	48	47	51	56	56	48·5
Nasal breadth	23	—	24	26	23	26	25·5	26	27
Orbital length	38	—	39	—	41·5	39	41·5	43	38
Orbital breadth	28·5	—	34	35	33	33	40	39	40
Cranial or Breadth-index	·825	·807?	·794	·793	·809	·809	·822	·867	·782
Height-index	—	—	·770	·730	·702	·792	·730	·728	·735
Alveolar-index	—	—	·978	·910	·957	·871	—	—	—
Nasal-index	·485	—	·505	·552	·489	·510	·455	·464	·556
Orbital-index	·750	—	·871	—	·793	·846	·963	·906	·789

3.—GENERAL CONCLUSIONS.

From the examination of these Tables it is clear that during the Mykenaean age, leaving Crete out of account, the long-headed and round-headed races were living side by side in Greece, in the Troad, and in the Aegaean area.

We must now consider the further difficult question of the relative antiquity of these two races in the region of the eastern Mediterranean. Direct evidence is unfortunately wanting in the area under consideration, and the only answer possible in the present state of our knowledge is based upon the sequence of the two races in the western Mediterranean, and in middle and southern Europe. The researches of Sergi, and others, have

[1] Virchow, *Alttrojische Gräber und Schädel. Abh. Kön. Akad. Wissen. Berl.* 1882, pp. 130–33.

[2] Virchow, *Ueber Griechische Schädel aus alter und neuer Zeit, Sitzungsb. Kön. Akad. Wissen. Berl.* 1893, pp. 696–99.

[3] Garson, *Journ. Hell. Stud.* v. p. 59.

proved that the earliest population of Italy, in the Neolithic Age, was long-headed, and that a round-headed people made its appearance at a later time, and not later than the beginning of the age of bronze. In Spain, France, and the British Isles, the same sequence is to be seen, the Mediterranean race of Sergi being represented by the Iberic race of the English and French craniologists, and the "Alpine race" of Sergi being the equivalent of the round-headed Celtic peoples of Spain, France, and Britain. These names relate to mere geographical varieties of two great aboriginal races, which occupied the whole of north-western Europe and the western Mediterranean, in the Neolithic and Bronze Ages. It is very probable that this sequence also holds good in the eastern Mediterranean. I therefore feel inclined to follow Ripley in believing that the aboriginal race in the Mediterranean, both east and west, was long-headed, and that it was invaded, in the Bronze Age, by the round-headed peoples.[1]

If this view be accepted, the skulls found by Mr. Hogarth in Crete belong to the small dark Mediterranean people,[2] the oldest, if not the only, ethnical element in the Pelasgians of Crete, whose swarthy complexions and dark hair are so vividly depicted in the frescoes of the great Palace-temple of Knossos, now being explored by Dr. A. J. Evans.[3] It would be rash, without better evidence than we have at present, to enter into the further question as to the identity of the round heads in the eastern Mediterranean with the Celts, or as to the ethnic relations of the fair-haired Achaeans to the Celtic or Teutonic peoples.

[1] Ripley, *The Races of Europe*, pp. 117, 404–10.

[2] [This conclusion is also reached by Prof. Sergi on the evidence of Skulls from Erganos in Crete in the *American Journal of Archaeology*, 2nd Series, v. 3, p. 315.—ED.]

[3] In his opinion, however, the head of the youth in the fresco is brachycephalic, and of the same shape as those of some of the present inhabitants of Crete, Letter 7, I. 1902.

AN ATHENIAN DECREE.

By Adolf Wilhelm.

Among the objects in the Finlay Collection, which recently passed into the possession of the British School at Athens, is the inscription published by Ulrich Koehler first (*C.I.A.* ii. 410) from the defective copy of Pittakis (L'ancienne Athènes, p. 494) and afterwards from a copy made by himself, *C.I.A.* iv, 2 p. 109, 410. It is written *στοιχηδόν* in large letters on the lower part of a slab measuring 0·475 m. in height, 0·525 m. in width, 0·12 m. in thickness and runs as follows:

. . . . ιασ. ισι . . . . . .
. . . ειλαν τέλεσ[ι τ]οῖς . . .
. . δοῦναι δὲ αὐτῶι καὶ σί-
τησιν ἐμ πρυτανείωι καὶ πρ-
οεδρίαν ἐν ἁπᾶσι τοῖς ἀγῶ-
σιν τοῖς τῆς πόλεως καὶ ἐκ-
γόνων τῶι πρεσβυτάτωι· ἐξεῖ-
ναι δὲ αὐτῶι καὶ εἰκόνα στ-
ῆσαι ἑαυτοῦ χαλκῆν. ἐφ' ἵππ-
ου ἐν ἀγορᾶι ὅπου ἂμ βούλη-
ται πλὴν παρ' Ἁρμόδιον καὶ
Ἀριστογείτονα.

The lettering fixes the date to the second half of the fourth century B.C.

There are two decrees of this period which offer some similarity of phrase:

C.I.A. II. 193, l. 15 ff.

καὶ πολλοὺς Ἀθηναίων λ[υτρωσά-
μενος ἐκ Κρήτης ἀπέστ[ειλεν τοῖς ἑ-
αυτοῦ ἀναλώμασιν καὶ [παραίτιος ἐ-
γένετο τοῦ σωθῆναι εἰ[ς τὴν ἰδίαν

II. 194, l. 6 ff.

[καὶ νῦν
τῆς μάχη]ς τῆς ἐν Ἑλλη[σπόντωι γεν-
ομένης π]ολλοὺς διέσ[ωισε καὶ λυτρ-
ωσάμενο]ς ἀπέστειλε[ν καὶ αἴτιος
ἐγένετο] τ]οῦ σωθῆναι[τοῖς αὐτοῦ ἀ-
ναλώμασι]

and in accordance with these, the first two lines of our inscription may be restored in this way:

. . . . . -ας εἰς τὴν ἰδίαν ἀπ
έστ]ειλαν τέλεσ[ι τ]οῖς αὐτ-
ῶν ?].

The words εἰς τὴν ἰδίαν are too short by one letter to fill the gap, but εἰς may possibly have been written with two sigmas, the doubling of sigma before tau being not unusual. Εἰς τὴν οἰκείαν would also be possible, but has one letter too many. However in restoring even carefully written στοιχηδόν inscriptions we must allow for irregularities; in particular iota is often inserted between two letters. The first word may be τοὺς ἁλόντ]ας. This is of course mere conjecture, and aims only at giving some meaning to the mutilated remains. It is to be noted that the verb is in the plural, whereas further on only one recipient of the honours is mentioned. Hence this phrase refers either not to him alone or to other persons altogether. Consequently it remains an open question whether τοῖς αὐτοῦ or τοῖς αὐτῶν should be read; the space does not admit of ἑαυτοῦ or ἑαυτῶν as in line 9.

Whatever the true restoration of the sentence may be, it is certain that it gave the reasons for the decree. Apparently, a full statement of the reasons came after the first sentence decreeing honour, a rather unusual form, for, as is well-known, the proposal generally begins with the statement of reasons introduced by ἐπειδή.

The lost first sentence which decreed honours is continued by δοῦναι δὲ αὐτῶι καὶ σίτησιν κ.τ.λ.: the person in question is further granted maintenance in the prytaneion and a place of honour in all the public games and performances together with the permission to erect an equestrian statue in the market place wherever he liked except beside the statues of Harmodios and Aristogeiton. We find the same limitation in the decree

C.I.A. II. 300 in the honour of Herodoros 295/4 B.C.: *στῆσαι δ' αὐτοῦ τὸν δῆμον καὶ εἰκόνα χαλκῆν ἐν ἀγορᾶι πλὴν παρ' Ἁρμόδιον καὶ Ἀριστογείτονα καὶ τοὺς Σωτῆρας.* And Brutus and Cassius the murderers of Caesar were honoured by statues near the *τυραννοκτόνοι* as Dio Cassius XLVII 20, 4 tells: *καὶ αὐτοὺς οἱ Ἀθηναῖοι λαμπρῶς ὑπεδέξαντο· ἐτιμῶντο μὲν γὰρ καὶ ὑπὸ τῶν ἄλλων σχεδόν τε πάντων ἐφ' οἷς ἐποίησαν, ἐκεῖνοι δὲ καὶ εἰκόνας σφισι χαλκᾶς παρά τε τοῦ Ἁρμοδίου καὶ παρὰ τὴν τοῦ Ἀριστογείτονος ὡς καὶ ζηλωταῖς αὐτῶν γενομένοις ἐψηφίσαντο.*

Apparently the statue in question was to be erected not by the Athenians, but by the man himself. Since the statue is to be an equestrian one, we must suppose him to have been of princely rank or at least in a high military position. In all probability, he was in Athens at the date of the decree, and applied in person for the permission to erect his own statue.

Finally, it is to be noted that there is no provision for the publication of the decree, a circumstance which suggests that our inscription was not a copy made under the supervision of the secretary and at the expense of the state, but was ordered and paid for by the subject of the decree. The large size of the stele and the letters would agree with this hypothesis. The two steles with the decree of the Athenians in honour of the king Arybbas and the king Audoleon (*C.I.A.* ii, 115 and 312) are on a similar scale. The inscription was perhaps set up beside the equestrian statue in the market place. The place where it was found is however unknown.

Only from the discovery of other fragments of the stele can we hope to learn the name of the man in question. Such a fragment would have to conform to certain requirements both as to form and as to content. It must be a piece of Pentelic marble forming the upper part of a stele. The inscription must be in large letters, twenty-one to the line, and in the character of the second half of the fourth century B.C. The decree must refer to a person of princely rank or exalted military position, who was in Athens at the time when the decree was passed and the copy must not have been made by the order of the state.

All these conditions are fulfilled by the large fragment of a decree of the Athenians, dating from the year of the archon Nikodoros 314/3 B.C. now in the British Museum and published by Boeckh in *C.I.G.* 105, by Newton in the Greek inscriptions in the British Museum xiv, by U. Koehler *C.I.A.* ii, 234 and by W. Dittenberger *Sylloge*[2] 166.

This inscription is on the upper part of a stele of Pentelic marble measuring 0·525 in width; the height is 0·648

Ἐπὶ Νικοδώρου ἄρχοντος
ἐπὶ τῆς Κεκροπίδος ἕκτη-
ς πρυτανείας Γαμηλιῶνος
ἑνδεκάτηι ἕκτηι καὶ εἰκο-
στῆι τῆς πρυτανείας· ἐκκλη-
σία· τῶμ προέδρων ἐπεψήφι-
ζεν Ἀριστοκράτης Ἀριστο-
δήμου Οἰν(αῖος) καὶ συμπρόεδρο-
ι· Θρασυκλῆς Ναυσικράτου-
ς Θριάσιος εἶπεν· δεδόχθαι τ-
ῶι δήμωι Ἄσανδρον Ἀγάθων-
ος Μακεδόνα ἐπαινέσαι ὅτ-
ι ἐστιν ἀνὴρ ἀγαθὸς ἰδίαι
τε περὶ Ἀθηναίους τοὺς ἀφ-
ικνουμένους εἰς τὴν χώρα-
ν τὴν ἑαυτοῦ καὶ κοινῆι περ-
ὶ τὸν δῆμον τὸν Ἀθηναίων κ-
αὶ παραγενόμενος εἰς τὴμ
πόλιν τάς τε ναῦς τὰς ἰδία-
ς καὶ τοὺς στρατιώτας παρ-
έχεται Ἀ]θ[ηνα]ίοις εἰς τὰς χ-
[ρείας . . . . . .]ρ

This Asandros is a general who is frequently mentioned in connexion with the complications of the earlier period of the Diadochi. His father is identified by Dittenberger with Agathon, appointed governor of Babylon by Alexandros the Great in 331/0 B.C., according to Diodoros xvii 64, 5 and Curtius Rufus v. 1. An older Asandros, mentioned by Arrian i. 17, 7, iv. 7, 2 as son of Philotas, and the well known Parmenion, also son of Philotas, were likewise his uncles. He was satrap of Caria during the years from 323 to 313. The decree of the Athenians falls in the early part of the year 313. He had come to Athens and placed his ships and troops at the disposal of the Athenians who at that time were under the rule of Demetrios of Phaleron, in order to facilitate certain military enterprises; according to Droysen, *Geschichte des Hellenismus* ii. p. 25, 1, the expedition

related by Diodoros xix. 68, 3 under the archon Nikodoros against Lemnos.

So much for the person concerned: further details about Asandros are to be found in J. Kaerst's article in Pauly-Wissowa's *Realencyclopaedie* ii. p. 1517 and P. Haussoullier's study on the Seleucides and the temple of Apollo at Didyma *Revue de philologie* 1900, p. 259.

As for the form of the decree, we see that it does not begin with a statement of the reasons assigned, in a clause of greater or less length introduced by ἐπειδή. The laudation comes first and a full statement of the reason follows. Further, Wilhelm von Hartel has put forward the suggestion (*Studien über attisches Staatsrecht und Urkundenwesen* 1878, p. 40, 54), that this is not an official copy of the decree, but one made by the order of the recipient of the honours. He was led to this conclusion by the absence of the name of the secretary and of the formula ἔδοξεν τῇ βουλῇι καὶ τῶι δήμωι or ἔδοξεν τῶι δήμωι and also by the use of an abbreviation.

As to the form of the stone, it is the upper part of a stele of Pentelic marble and agrees in its measurements with i. 410.

The writing is στοιχηδόν with the exception of the first line, in which the letters are irregularly placed so that at the end some space is left free; see my remark in *Göttingische gelehrte Anzeigen* 1898, p. 206. In the other lines, we have regularly twenty-one letters; slight divergences occur only in lines 5, 16, and in the beginning of l. 21 if we are right in restoring παρ[έχεται.

All these reasons suggested the hypothesis that the two fragments belong to the same stele. A glance at the accompanying reproduction, (Fig. 53) for which I am indebted to the kind offices of Mr. Cecil Smith and Mr. R. C. Bosanquet, is sufficient to establish it. The two stones show exactly the same kind of damage in corresponding places and a line of fracture in the left half of the stele is continued from the one stone to the other. These facts demonstrate the connexion of the two fragments which by a curious accident are both in British possession, the one in the British Museum, the other in Athens in the collection of the British School.

Unfortunately, we learn nothing new from putting the two fragments together. It is to be highly regretted that the most interesting lines, those which set forth the reasons of the decree, are lost. How much is missing, I am not able to say, unless it is possible by measurement of the width of the stele at the top and at the bottom to calculate what the

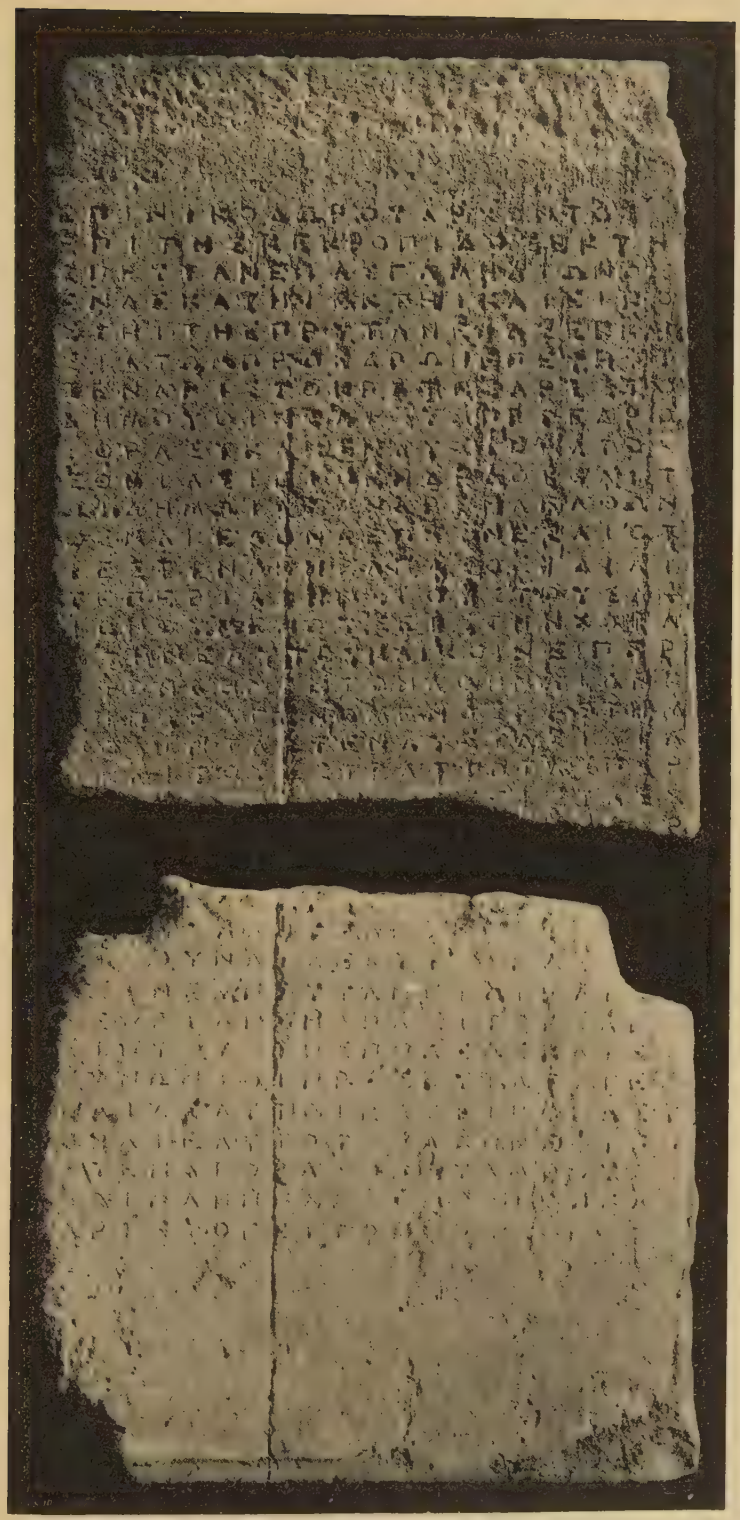


FIG. 53

original height must have been. I am inclined to believe that a portion is missing, because, generally speaking, the measurement of large Greek stelai can be expressed in a round number of Greek feet or rational fractions of a foot. Instances are to be found in a forthcoming article concerning a new fragment of the well known Eleusinian decree *C.I.A.* iv. p. 59, 27b.

The width being somewhat more than a Greek πῆχυς the height seems to have been at least three Greek feet. Now the two fragments measure only 1·123 in height.

Consequently the restoration of the first two lines of the lower fragments remains uncertain, as does also their grammatical connexion with the preceding clause. It is possible that the plural ἀπέστειλαν refers to Asandros and his brother Agathon, mentioned by Diodoros xix, 75, 2; but this is no more than a possibility.

On the other hand, we get a confirmation, the more welcome, because such coincidences are rare, of v. Hartel's hypothesis, that *C.I.A.* ii. 234 is an unofficial copy, in the fact that in ii, 410 there is no clause ordering publication.

[*Owing to the Author's proof not having come to hand in time, this article had to go to press with editorial corrections only.*]

BIBL. LONDIN. UNIV.

ANNUAL MEETING OF SUBSCRIBERS.

THE Annual Meeting of Subscribers to the BRITISH SCHOOL AT ATHENS was held in the rooms of the Society of Antiquaries, Burlington House, on October 24th, 1901, SIR RICHARD JEBB, Litt.D., D.C.L., LL.D. (Regius Professor of Greek, and M.P. for Cambridge University) in the Chair. The following Report was read by the Acting Hon. Secretary (Mr. R. J. G. MAYOR) on behalf of the Managing Committee :—

THE Committee are very glad to announce that within the last few months HIS MAJESTY THE KING, who as Prince of Wales had from the first taken a warm interest in the British School at Athens and given it his hearty support, has been graciously pleased to signify his continued desire for its welfare by becoming its Patron.

The work of the School, both on its teaching and on its exploring sides, has been energetically carried on during the past session under the newly appointed Director, Mr. Carr Bosanquet. The number of students in residence was five, as compared with six in the previous session. One of these, Mr. J. H. Marshall, Scholar of King's College, Cambridge, had been already admitted for the session 1898–99, and came out now with the Prendergast Travelling Studentship; and a second, Mr. J. H. Hopkinson, Scholar of University College, Oxford, had been already admitted for the session 1899–1900, and came out again for a second session as Craven Fellow of the University of Oxford. The three newly admitted students were Mr. K. T. Frost, of Brasenose College, Oxford, who held the Studentship offered by the Managing Committee to the University of Oxford; Mr. R. D. Wells, of Trinity College, Cambridge, who was appointed by the Committee to the Architectural Studentship on the recommendation of the President of the Royal Institute of British Architects; and Mr. J. ff. Baker-Penoyre, of Keble College, Oxford.

Mr. Marshall, who reached Greece in November, spent December and January in the Museums at Athens and at Candia, working out a comparison of the Mycenaean remains from Crete and the mainland. In the course of this study he made most successful restorations of the unpublished vases from the Vapheio tomb and of some vases from a newly found grave at Mycenae, which were entrusted to

him for this purpose by Dr. Tsountas. Subsequently he travelled for some weeks in Eastern Crete and took part in the School excavations at Praesos during May, June, and July.

Mr. Hopkinson, who reached Greece at the beginning of December, spent most of his time in work upon the vase collections in the Athenian Museums, devoting particular attention to the unpublished fragments from the Acropolis excavations. He also spent three weeks in Crete, partly at the Museum in Candia and partly in the neighbourhood of Knossos; visited sites on the western coast of Asia Minor, and worked for a fortnight at Mykonos on the unpublished vase fragments from the excavations in Anti-Delos. Since his return to England Mr. Hopkinson has been appointed to the post of Lecturer on Greek in the University of Birmingham.

Mr. Frost received the School Studentship on condition that he should spend three months in Germany, to learn the German language and work in Museums, and three months in Greece. He accordingly studied in Berlin from December to March, and afterwards came out to Greece for four months, most of which he spent at Athens at work in the museums. The subject to which he gave special attention was Greek athletics and the athletic schools of sculpture.

Mr. Wells reached Greece in March, spent a month in Athens, and then went on to Crete, where he remained till July, making surveys of sites excavated by the School at Praesos and Petras, and of the Mycenaean site at Kato Zakro, where Mr. Hogarth was digging. The work included both the mapping of very irregular broken country and the plotting of architectural remains, and the Committee think themselves fortunate in having secured the services of Mr. Wells for the purpose, since his previous experience with Mr. Somers Clark in Egypt gave him special qualifications for this difficult task.

Mr. Baker-Penoyre was in Greece from the end of March to July, during which time he travelled in various parts of the country, and worked in the Athenian Museums, paying special attention to sculpture.

The new Director, Mr. Bosanquet, reached Athens at the end of October and returned to England at the end of August, thus residing altogether ten months in Greece, of which about six months were spent at Athens and about four in Crete. Mr. Bosanquet has marked the beginning of his term of office by submitting to the Committee some valuable suggestions for the guidance of students at the School, which will, it is hoped, help to increase its usefulness as a teaching institution. These suggestions were printed in the last number of the Annual and are at the disposal of intending Students on application to the Secretary.

Excavations were undertaken this year by the School at Praesos, situated on the central plateau of Crete, and at Petras on the coast a few miles to the north. The work was conducted by the Director with the assistance of Mr. Marshall and Mr. Wells. Praesos was in historic times the chief centre of the Eteocretans, who represented the most primitive element in the population of ancient Crete, and it was therefore hoped that the excavations here might bring to light traces of civilisation of the Mycenaean epoch, together with inscriptions in the non-Hellenic and presumably Eteocretan language, of which one specimen had previously been

found in this neighbourhood. The first hope was not fulfilled, for on the site of Praesos itself only one product of Mycenaean art was discovered, a gem found embedded in the mortar of a late Greek house, into which it must have been accidentally brought with the earth from some neighbouring tomb when the house was built. About a mile away, however, a large house of late Mycenaean work was discovered in a valley near a spring, and somewhat nearer the city were found two tombs of the same period, one a square chamber with a dromos, and the other a well built bee-hive tomb. In the same neighbourhood a number of later tombs were opened, ranging from the Geometric period to the fourth century and containing a large quantity of vases of various periods.

Praesos itself appears from the remains discovered to have been an important place from the eighth or seventh century downwards. The most interesting objects were brought to light in a *temenos* on the top of a crag near the town. Here Mr. Bosanquet was fortunate enough to discover an inscription seventeen lines long in the non-Hellenic language referred to above and written in Greek characters of the fifth century, B.C. In the same place were found a series of votive offerings in bronze and terra cotta. The terra cottas, which range from the sixth to the fourth century, reveal the existence of a vigorous native school of art, and include the upper part of a fine archaic statue of a young god, half life-size, and a well preserved head with fragments of the body of a couchant lion. The remains of three other sanctuaries were also investigated. On a saddle below the Acropolis was discovered a large and solidly constructed building of late Greek workmanship, with a front seventy-five feet long, which may, it is suggested, have been an "Andreion" of the kind in which the Cretan citizens met for common meals.

The excavations at Petras on the sea-coast brought to light considerable quantities of pottery of the Mycenaean period. The site appears, however, to have been systematically turned over and terraced by its owners a few years ago, and it was therefore not thought worth while to undertake here work on a large scale. Accounts of the discoveries at Praesos and Petras will be published in the forthcoming number of the Annual.

Supporters of the British School will be interested to hear of the work that has been done in the other parts of Crete during the past season by the Cretan Exploration Fund. At Knossos Mr. Arthur Evans, an Associate of the School, assisted by two former students, Dr. Mackenzie and Mr. Fyfe, has continued the excavation of the great prehistoric palace which has been associated with the legends of Minos and the Labyrinth. The whole northern end of the palace and an extensive eastern quarter have been uncovered during the past year. Shortly before the close of the season a triple flight of stone stairs was brought to light, leading down from an upper corridor to a suite of halls, showing remains of colonnades and galleries. As it appears that the principal state-rooms were situated on this lower level, it is possible that the results of next season's work may surpass in interest even those which have already been obtained. Mr. Hogarth, the late Director, has also been enabled by a grant from the Cretan Exploration Fund to explore an ancient site at Zakro, in the extreme east of the island. He

has there laid bare a small Mycenaean town with well preserved remains of the lower part of the houses and magazines, and has discovered some fine examples of early pottery and an interesting deposit of clay impressions of Mycenaean gems and signets, including 150 different types. Mr. Hogarth was assisted by Mr. Wells in mapping, and by Mr. Marshall in classifying pottery. Through the kindness of Mr. Evans and Mr. Hogarth detailed accounts of these discoveries will appear in the next number of the School Annual.

The sixth volume of the School Annual, which appeared in the course of last spring, contained matter of special interest. It included an account by Mr. Arthur Evans of the first year's work on the Palace at Knossos, with papers by Mr. Hogarth on the Early Town and Cemeteries at Knossos and on the Dictaean cave, and by Mr. F. B. Welch on the pottery found at Knossos. The expense of publication was unusually heavy; but the excess has been largely recouped by additional sales, the proceeds of which will appear in next year's accounts, and also by a generous and unsolicited donation of £20 given by Mr. Darbishire in recognition of the special value of the number—an example which the Committee hope to see often followed in future.

Three open meetings of the School were held in Athens during the past session, and were well attended. The Committee are glad to record, as a sign of the friendly relations existing between the School and its neighbours, that at one of these meetings a paper was read by Dr. Wilhelm, Secretary of the Austrian Institute at Athens, on an inscription formerly in Mr. Finlay's house and now in the collection of the British School; while at another meeting a paper was read by a Greek scholar, M. Clon Stephanos, director of the Anthropological Museum in the Academy at Athens, on the ethnology of prehistoric Greece.

The School has been of assistance during the past year to several English students, whose residence in Greece was too short to enable them to become members, but who were glad to make the School their headquarters while at Athens. Among these were Mr. J. B. Holburn, of Merton College, Oxford, in December and January; Mr. J. F. Crace and Mr. W. Hasluck, both of King's College, Cambridge, in March and April; and Mr. A. M. Daniel, of Trinity College, Cambridge, in May and June. All of these resided for some weeks in the Hostel. Mr. Crace and Mr. Hasluck, and also Miss Crum, of Newnham College, spent the Easter vacation at Athens studying the archaeology of the Acropolis, which was set as a special subject in the second part of the Classical Tripos, and all were placed in the First Class. Mr. Hasluck will continue his work in Greece next year with the aid of the Studentship of £100 offered by the School to the University of Cambridge. Mr. Edgar, an old member of the School, and now on the staff of the Ghizeh Museum, also resided in the Hostel for a month last autumn, while continuing his work on the Phylakopi pottery.

The repairs to the School building, which were stated in last year's report to be urgent, were successfully carried out during the autumn of 1900 under the direction of Mr. Fyfe, who held the architectural studentship last year. The principal matter requiring attention was the reconstruction of the roof, but the opportunity has been

taken to carry out a number of minor improvements and repairs which have added greatly to the appearance as well as to the comfort and convenience of the School building.

The precinct in which the School and Hostel stand has also been much improved during the past year, by means of private subscriptions generously contributed by the Director and a few other friends of the School. A new carriage road has been constructed giving access to the School from the street on the south; several hundred trees have been planted; and a terraced walk has been made along the upper, or northern, end of the School grounds. It is proposed next year to complete the work by laying out the ground on the south-east side of the Hostel.

The Committee point out with satisfaction that the cost of the very considerable repairs to the School, amounting to over £450, has been defrayed out of the revenue of the last two years, without any inroad upon the small invested capital of the School. This result has been obtained mainly by the special grants for the Praesos excavations made by the Society of Dilettanti (£50) and the Cretan Exploration Fund (£200), together with one of £40 from the Cambridge Prendergast Fund made to the Director for the same purpose. For these the Committee desire to return warm thanks. They also acknowledge with equal warmth a substantial addition to their general funds of £46 17*s.* 9*d.*, the result of contributions from visitors to Athens—mainly schoolmasters—on the steamer *Argonaut*, collected and handed over by the Rev. S. R. James, Headmaster of Malvern College.

In the course of the past spring, Mr. Loring, the Hon. Secretary of the School, returned from South Africa and for a time resumed his old post. But on receiving the offer of a commission in the Scottish Horse, he decided to go back to the seat of war. As Mr. Macmillan did not see his way to carry on the secretarial work any longer, Mr. R. J. G. Mayor, of the Board of Education, an old student of the School, most kindly agreed to act in Mr. Loring's absence and was accordingly appointed Secretary pro tem. under Rule 18. All friends of the School will have received with great regret the news that Mr. Loring was severely wounded in the right arm and leg in the attack on Col. Kekewich's column last month. As the wounds, however, were not classed as dangerous and Lieut. Loring is among those who are described as doing well, the Committee think it probable, in the absence of detailed information, that the School may ultimately be the gainers by his earlier return to England. In this hope they to-day re-nominate Mr. Loring as Hon. Secretary, and also nominate Mr. Mayor as Acting Hon. Secretary until Mr. Loring's return.

As promised in the last Report, the monograph on St. Luke's Monastery at Stiris, on which Messrs. Schultz and Barnsley have so long been engaged, has now been published; it has been generally recognised as a most valuable contribution to the study of Byzantine architecture. Friends of the School are reminded that Mr. Schultz still has a good deal of material in his hands if funds could be provided for publication, while the Committee would gladly set other students to

work in this important field if they were in a position to do so. Subscriptions to the Byzantine Architecture Fund for this purpose would be gladly received by the Treasurer. There are still some copies on hand of the monograph on St. Luke's, which can be obtained on application to the publishers, Messrs. Macmillan and Co., or from any bookseller.

Considerable progress has been made with the scheme for establishing a British School at Rome, to which reference was made in the last Report. In this case also it was necessary to find a substitute for Mr. Loring, and Mr. A. H. Smith, of the British Museum, has kindly consented to act as Secretary in his absence. Mr. G. McN. Rushforth, of Oriel College, Oxford, has been appointed Director of the School and has been resident in Rome since November 1900: an excellent set of rooms was acquired in January 1901, in the Palazzo Odescalchi, Piazza SS. Apostoli: and the School was formally opened by Lord Currie, H.M. Ambassador to the Quirinal, on April 11 last. Thanks to the generosity of Dr. Steele, for many years a physician in Rome, who has presented to the School a valuable collection of books and also some library furniture, the nucleus of a good library has been formed. In addition gifts of books have been kindly made by the Oxford and Cambridge University Presses, by the Trustees of the British Museum, and by the following publishers: Messrs. Macmillan, Murray, Longmans, Rivington, Bell, and Methuen. The work of the School has already begun. The Director has written a full report on the recent excavations, which appeared in the *Times* of January 9, and has delivered a lecture, which will shortly be published, on the ancient Church of Santa Maria Antiqua. A monograph on the Roman Roads in the Campagna, by Mr. T. Ashby, late Craven Fellow in the University of Oxford, and now a student at the School, is also nearly ready for publication. Additional funds are however urgently needed, if the work of the School is to be properly developed. It should be remembered that the work of the School will not be confined to classical archaeology. It is intended to be a centre for all British students in Rome: and the provisional scheme, approved by the General Committee, provides that every period of the language and literature, antiquities, art, and history of Rome and Italy shall be considered as falling within its province.

In conclusion, the Committee think that they are entitled to say that the British School at Athens is every year fulfilling more successfully the objects for which it was founded. In the work of excavation it has, even with the scanty means which were at first at its disposal, done much—as much, it may confidently be said, in proportion to its funds, as has been done by any of the other schools in Athens: and, in view of the somewhat greater financial stability which it is now beginning to enjoy and the opportunities available for work both in Crete and elsewhere, it may be hoped that results as interesting as any of those secured in the past will be forthcoming in the next few years. On the side of education too the school has done most valuable service in providing a centre for classical students who wish to supplement their work at the Universities by one or two years' work in Greece, while it has also been of great assistance to British travellers in Greece

generally. There is however one thing which the School still urgently needs, namely, some provision for advanced students of archaeology, by which their services might be secured to the School for a series of years. In this respect the British School is at present weaker than any of the foreign schools in Athens, all of which include on their staff either an assistant director or one or more such advanced students. For the want of such assistance the School is considerably hampered both in the conduct of excavations and in the equally important and difficult task of preparing the results of excavations for publication. It is difficult however to see how the School can, with the funds now at its disposal, secure for any length of time the services of such men as are required without diminishing the sum, even under present circumstances by no means excessive, which is available for excavation; and the Committee therefore hope that this need may receive the serious consideration of all friends of the School.

SIR RICHARD JEBB, in moving the adoption of the Report, addressed the meeting as follows :—

The contents of the interesting Report to which we have listened fully justify a remark which occurs towards its close,—namely, that the British School at Athens is continuing to fulfil the purposes for which it was founded. It was intended to be a permanent station at Athens, from which exploration in Hellenic lands might be conducted. It was to be, at the same time, a centre of regular training for students of Hellenic antiquity. And lastly, though this function was necessarily less definite, it was to serve as a sort of Archaeological Consulate for cultivated British visitors to Greece, a place where they could obtain advice and guidance as to the disposal of their time. The year which ended last summer is the fifteenth during which the School has performed this threefold office. There are some here to-day who can remember the beginning of that period. In October, 1886, the Executive Committee reported to a meeting of the General Committee and other friends of the School that a house had just been built for it at Athens, from plans generously furnished by Mr. F. C. Penrose; and also that that eminent archaeologist had consented to go to Athens as Director of the School for one year. In July, 1887, the first Annual Meeting of Subscribers to the School was held in this room, under the presidency of the late Lord Carnarvon. The Report of the Committee recorded the successful completion of the School's first year of work, under the direction of Mr. Penrose. He had given public lectures on the Parthenon, the Erechtheum, and the Olympieum; and, with aid from the Society of Dilettanti, had conducted excavations on the site of the Olympieum. The first two students admitted to the School under his Directorship were Mr. Ernest Gardner and Mr. Hogarth, both destined in later years to hold the office of Director. From that time to the present, the School has steadily gone on doing good work. It has gained an honourable position among the other institutions at Athens representing various nationalities, which are engaged in the same pursuits, and its relations with them, from the first, have been of the most cordial character.

In establishing this kind of archaeological centre, we came long after France and Germany. The French School at Athens was established in 1846. The present constitution of the German Institute at Athens dates (I think) from 1874; but there had been a Prussian Institute at Rome since 1829. Those who endeavoured to interest English scholars in the subject in the later seventies have some reason to remember the general apathy with which the notion was received. The traditional English feeling seemed to be that archaeological exploration is the affair of a gifted individual, of a William Martin Leake, a Henry Layard, or a Charles Newton. The idea of co-operation, and of a permanent centre in Greece, was too novel and too foreign to be readily accepted. At last, in 1883, the project for a British School at Athens was launched under the highest auspices, and with the best hopes. But, owing to the lack of general public interest in the matter, the School had to contend with financial difficulties, which only the aid of Oxford and Cambridge, and the liberality of some private friends, enabled it to surmount. The recent Government Grant to the School has been a much needed and well deserved assistance, and is especially to be welcomed as a recognition of the fact that it is a public service to maintain the position of England in this field of scientific research; a field which engages the energies of all the most highly civilised nations.

If now we turn to the School's record for the past year, the foremost fact is that the School has been doing its part in the latest researches. The centre on which the attention of classical archaeologists has lately been focussed is, without question, Crete.

England has been represented there by two agencies—that of the Cretan Exploration Fund, and that of the British School at Athens. With aid from the Cretan Fund, Mr. Arthur Evans, assisted by Mr. Duncan Mackenzie and Mr. Fyfe, has been continuing his remarkable discoveries at Knossos. The prehistoric palace proves to be even more extensive than was supposed. A great Central Court has been found; also flights of steps leading down to a columnar hall. Among the objects unearthed has been the lid of an Egyptian alabastron, engraved with the name of a Hyksos king, and a Babylonian cylinder of lapis lazuli, mounted with gold. Some further wall-paintings, too, have been found; in one of these, girls are seen taking part in the sport of bull-hunting. The poet Bacchylides, in the first of his recently recovered odes, describes the warlike Minos of Crete as returning from an expedition to "Knossos that beautiful city" (ἱμερτὰν πόλιν). It is curious to reflect that, when Bacchylides wrote, these remains, which illustrate the ancient magnificence of Knossos, had already long been buried beneath the Cretan soil. After twenty-four centuries they have been found again, and the poet's phrase has now a more definite meaning for us than it perhaps had for himself. Mr. Hogarth's excavations at Zakro, on the east coast, also aided by the Cretan Fund, have discovered the traces of a Mycenaean settlement with large quantities of early pottery, and a remarkable collection of clay seal impressions, which may have been used for some commercial purpose. The work of the British School in exploring Praesos, on the central plateau of Eastern Crete, was carried on by the Director, Mr. Bosanquet, with Mr. Marshall and Mr. Wells; and has had some positive

results of great interest—chief among which must be placed the discovery of a second inscription in an unknown language, presumably that spoken by the old Eteocretan inhabitants, but written in Greek characters of the fifth century. As the Report has indicated, no vestiges of Mycenaean occupation were found at Praesos: for the Mycenaean gem, found embedded in the mortar of a late Greek house, had evidently come there by accident, having been brought in some earth taken from a neighbouring tomb. But the absence of such evidence at Praesos is in itself a significant fact. It supplements the positive results obtained at other places, by indicating a limit to the extent and influence of the Mycenaean settlements in early Crete. Those settlements were made along the coasts, but the civilisation which they brought did not penetrate to the central highlands. The members of the British School also worked, as we have heard, at Petras, seven miles north of Praesos, on the coast, and there found some Mycenaean remains.

While Crete has been the chief centre of interest, the year has not been barren of archaeological events in other parts of Hellas which are of interest for members and supporters of the British School. One, at least, of these deserves special mention. Professor Furtwängler has made a fresh examination of the temple in Aegina, and has ascertained that it was dedicated, not to any of the greater divinities, but to a local goddess called Aphaia. The dedicatory inscription has been found, and runs thus:—'being priest' (the name is mutilated), 'the house was made for Aphaia; the altar and the ivory image were added; and the wall was made around it.' All that is known about Aphaia may be read in an article by Dr. A. Rapp (in Roscher's *Lexicon*) on Britomartis, the Cretan goddess with whom Pausanias identifies Aphaia. This Britomartis, flying from the pursuit of Minos, passed from Crete to Aegina, and there suddenly vanished: folk-lore connected the name Aphaia with *ἀφανής*. Dr. Rapp finds in this myth the cloud on the mountain-top, which passes downwards, and disappears. The temple in Aegina was dedicated soon after 490 B.C., replacing an older Doric temple of the sixth century. Pausanias says (2, 30, § 3) that Pindar wrote a poem for the Aeginetans in honour of Aphaia. This poem may well have been a Prosodion, written for the dedication of the new temple. Attention may now be recalled to an old conjecture, that in Herodotus III. 59, where a temple in Aegina is mentioned, Ἀφαίης should be read, instead of Ἀθηναίης.

There is no abatement, but rather an increase, in the activity with which Hellenic sites are being explored by the co-operation of various countries. The French, having completed (or nearly so) their work at Delphi, are about to examine the site of the temple of Athena Alea at Tegea. The American School is working at Corinth and at Oeniadae on the coast of Aetolia. The German Institute has been busy at Pergamon; the Austrian at Ephesus; the Prussian Museums at Miletus.

It is fitting, I think, on this occasion to offer our congratulations to the editors of the *Annual* of the British School at Athens, of which the sixth volume appeared last spring. It has proved a valuable adjunct to the activities of the School, and has well earned the place which it now holds in the English literature—a very select one—of classical archaeology.

In conclusion, I may perhaps be allowed to touch on the relation between the two principal aspects of the School's work. It aims at advancing knowledge. It also aims at educating young archaeologists. To preserve a due balance between these two objects may sometimes be a rather difficult task. It is very satisfactory to know that our Director has marked his first year of office by formulating some suggestions for the guidance of students. The teaching function of the School is evidently of high importance. Our supply of experts must largely depend upon it. The School at Athens, and, as we can now add, the recently opened School at Rome, offer the best facilities available to our countrymen for a practical training in archaeological work. Efficiency as a centre of such training is also one of the strongest grounds on which our School can found a claim for the continuance of that aid which the Government has justly and wisely extended to it. But we shall all be of one mind in desiring that this educational work should be carried on without detriment to the energies of the School as an agency for exploration and the advancement of knowledge. This brings me to the last point to which I would briefly advert. The Report notices a need of the School for which adequate provision has still to be made. It would be of great advantage to the Director if he could command the services of another advanced archaeologist—or of more than one such colleague—to assist in conducting excavations, and in editing the results for publication. Some of the foreign Schools are more fortunately circumstanced in that respect. What we want, it seems to me, is something in the nature of an archaeological Fellowship in connection with the School, to be tenable for a certain term of years. The appointment to such Fellowship might rest with the Managing Committee in consultation with the Director of the School for the time being. In selecting among candidates, a preference might be reserved to former students of the School who could produce evidence of good work; but candidature should not be restricted to such students. Such a Fellowship would be an object to which a student of the School might look forward as a possible opportunity of more advanced work. It would be a step towards organising a career for a man who possessed a genuine gift and love for such pursuits. It would also be a legitimate development of our School, bringing it nearer to the idea of a College of archaeology at Athens. The French School of Athens, it may be observed, actually possesses much of that character. I venture to throw out this suggestion rather as something that we might do well to keep in view, than as a proposal which there is any immediate prospect of realising. We may have to wait; but the fulfilment may be reached some day, possibly sooner than we can now foresee. Nineteen years ago, there was no British School at Athens; and what is more, very few people could then venture to anticipate that such a School would soon come into existence. To-day, the British School at Athens is an institution which all Englishmen who care at all for such studies can contemplate with just satisfaction. It is a School which the patient energies of successive Directors, and the loyal work of successive students, have carried through a time of trial to the stage of assured success; a School which has earned the recognition of the State, as rendering public service by contributing to the

advancement of knowledge, and by upholding the credit of this country in the peaceful and friendly rivalries of international effort; a School which, as we can now say with confident hope, has before it a future of even increased usefulness and distinction.

The motion was seconded by Mr. A. H. SMITH, and carried unanimously.

The Director, Mr. BOSANQUET, then gave some further account of the results of the excavations carried out during the past Session at Praesos and elsewhere.

The following Resolution was carried unanimously, on the motion of Mr. F. C. PENROSE, seconded by Mr. F. E. THOMPSON:—

"That Prof. ERNEST GARDNER, Prof. PERCY GARDNER, Prof. PELHAM, and Dr. WALDSTEIN be re-elected members of the Committee. That Dr. LEAF be re-elected Hon. Treasurer, and Mr. LORING Hon. Secretary, for the ensuing year, and that Mr. R. J. G. MAYOR be elected Acting Hon. Secretary until Mr. LORING'S return. That LORD LINGEN and Sir FREDERICK POLLOCK be re-elected Auditors of the School for the ensuing year, and that Mr. EDWIN WATERHOUSE be elected an additional Auditor."

A vote of thanks to the Auditors was moved by Prof. J. S. REID, seconded by Dr. LEAF, and carried unanimously.

A vote of thanks to the Chairman was carried unanimously, on the motion of Prof. PERCY GARDNER, seconded by Mr. A. P. WHATELEY.

Sir RICHARD JEBB acknowledged the vote, and the proceedings closed.

INCOME AND EXPENDITURE 4TH OCTOBER, 1900, TO 3RD OCTOBER, 1901.

	£	s.	d.
Annual Subscriptions as per list .	897	4	0
,, ,, for 1899–1900 .	10	0	0
,, ,, paid in advance	6	2	0
Government Grant	500	0	0
Cretan Exploration Fund[1] . .	200	0	0
Society of Dilettanti[1] . . .	50	0	0
Prendergast Fund[1]	40	0	0
Interest on Investment . . .	56	17	6
Sale of Annual	30	11	5
	£1,790	14	11

[1] Special Grants for Excavations at Praesos.

	£	s.	d.	£	s.	d.
Director's stipend, one year . .				500	0	0
Architect, Mr. Fyfe, balance . .				25	0	0
,, Mr. Wells, on account .				50	0	0
Studentship, Mr. Frost . . .				100	0	0
House maintenance[1] . . .				297	5	7
Hostel maintenance .	79	19	11			
Less Fees from Students	44	8	7			
				35	11	4
Excavations, Praesos .	394	12	0			
,, sundry payments .	43	2	2			
				437	14	2
Publication of Annual . . .				170	11	6
Printing, Postage, &c. . . .				24	18	5
Sundries				10	5	3
Subscriptions paid in advance . .				6	2	0
Balance to capital				133	6	8
				£1,790	14	11

[1] Including £246 6*s.* 3*d.* balance of repairs to roof and fabric.

BYZANTINE FUND.

	£	s.	d.
Balance from last Account . .	55	1	8
	£55	1	8

	£	s.	d.
Balance forward	55	1	8
	£55	1	8

CAPITAL ACCOUNT.

	£	s.	d.		£	s.	d.
Balance from last Account	2,411	10	3	Library	45	14	9
Donations, as per list	107	1	9	Hostel furniture	21	2	5
Balance of Income	133	6	8	Balance to next Account	2,585	1	6
	£2,651	18	8		£2,651	18	8

BALANCE ACCOUNT.

	£	s.	d.		£	s.	d.
Balance of Capital	2,585	1	6	Cash in Bank	475	17	2
Subscriptions paid in advance	6	2	0	Director, balance of Excavation Fund unexpended	45	8	0
Byzantine Fund	55	1	8	,, one quarter's stipend pre-paid	125	0	0
				India 3% Stock, at par	2,000	0	0
	£2,646	5	2		£2,646	5	2

Examined and found correct,

LINGEN,
FREDERICK POLLOCK.

October 11th, 1901.

DONATIONS—1900-1901.

	£	s.	d
Crum, Miss Jessie	1	1	
Darbishire, R. D.	20	0	
Gardner, Prof. Percy	10	10	0
Keser, J., M.D.	3	3	0
Pawson, A. H.	5	0	0
Simpson, W. W.	10	0	0
Tuke, Miss	5	5	0
Whateley, A. P.	5	5	0
Visitors, SS. "Argonaut," per Rev. S. R. James	46	17	9
	£107	1	9

ANNUAL SUBSCRIPTIONS—1900-1901.

	£	s.	d.
HIS MAJESTY THE KING	25	0	0
The University of Oxford	100	0	0
The University of Cambridge	100	0	0
The Hellenic Society	100	0	0
The Society of Antiquaries	5	5	0
Brasenose College, Oxford	5	0	0
Christ Church, Oxford	20	0	0
Corpus Christi College, Oxford	5	0	0
Magdalen College, Oxford	10	0	0
King's College, Cambridge	10	0	0
McGill University, Montreal	5	5	0

	£	s.	d.
Agnew, Sir W.	2	2	0
Aitchison, G.	1	1	0
Allbutt, Prof.	1	1	0
Anson, Sir W. R.	10	0	0
Austen Leigh, E. C.	1	1	0
Ashby, Thomas	1	1	0
Bailey, J. C.	5	0	0
Barlow, Sir T.	1	1	0
Bodington, Dr. N.	1	0	0
Bosanquet, C. B. P.	2	0	0
Bosanquet, R. C.	1	1	0
Brinton, H.	1	1	0
Brooke, Rev. Stopford	1	1	0
Brooks, E. W.	1	0	0
Bury, Prof. J. B.	1	1	0
Butcher, Prof.	2	2	0
Butler, Dr.	2	2	0
Buxton, H. E.	1	0	0
Campbell, Prof. L.	1	1	0
Carlisle, Miss	1	1	0
Carr, Rev. A.	1	1	0
Carr, H. Wildon	1	1	0
Caton, R.	1	1	0
Chambers, Col. O.	10	0	0
Chawner, W.	2	2	0
Clark, C. R.	1	0	0
Clausen, A. C.	2	2	0
Colchester, Lord	5	0	0
Cole, A. C.	2	2	0
Corbett, V.	1	0	0
Cruse, D. A. (Leeds Library)	1	0	0
Cruddas, Miss D.	5	0	0
Crum, Miss Jessie	1	1	0
Cust, Miss A. M.	1	1	0
Dabis, Miss	1	1	0
Davey, Lord	5	0	0
Davidson, H. O. D.	1	1	0
Donaldson, Rev. S. A.	1	1	0
Earl, A. G.	1	1	0
Egerton, Earl	10	10	0
Elliot, Rev. F. R.	1	1	0
Carried forward	478	13	0

ANNUAL SUBSCRIPTIONS 1900–1901 (*continued*).

	£	s.	d.
Brought forward	478	13	0
Elliot, F. E. H.	1	0	0
Eumorfopoulos, N.	1	1	0
Evans, A. J.	10	0	0
Evans, Sir J.	5	0	0
Ewart, Miss	5	0	0
Fletcher, H. M.	1	1	0
Fort, J. A.	1	0	0
Fowler, W. W.	1	1	0
Freshfield, D. W.	10	0	0
Furneaux, L. R.	1	0	0
Gardner, Prof. Percy	2	2	0
Graham, E.	1	1	0
Griffiths, F. M.	1	1	0
Haigh, A. E.	1	0	0
Hallam, G. H.	1	1	0
Hawes, Miss	1	1	0
Hay, C. A.	5	5	0
Heberden, C. B.	2	2	0
Henderson, A. E.	1	0	0
Hereford, Bishop of	1	1	0
Hill, G. F.	1	1	0
Hogarth, D. G.	2	0	0
Hooper, G. N.	1	1	0
James, Rev. S. R.	2	0	0
Jones, H. Stuart	2	2	0
Kenyon, F. G.	1	1	0
King, Miss	5	0	0
Lambert, Dr.	1	0	0
Lascelles, B. P.	1	0	0
Lawson, Sir E.	5	0	0
Leaf, Mrs. C. J.	5	5	0
Leaf, Walter	50	0	0
Lecky, Mrs.	3	3	0
Lewis, Mrs. A. S.	2	2	0
Lingen, Lord	2	2	0
Lloyd, Miss	1	1	0
Loring, W.	10	0	0
Loring, Miss	1	1	0
Lynch, H. F.	2	2	0
Macan, R. W.	1	1	0
MacLehose, James J.	1	1	0
Macmillan, G. A.	25	0	0
Marindin, G. E.	1	1	0
Mayor, R. J. G.	1	1	0
Miller, Rev. A.	1	1	0
Mitchell, C. W.	10	0	0
Mocatta, F. D.	3	3	0
Mond, Ludwig	100	0	0
Monk, The Misses	5	0	0
Monro, D. B.	3	3	0
Morley Earl	1	1	0
Morley, Howard	5	5	0
Morshead, E. D. A.	1	0	0
Myers, E.	1	1	0
Mylne, Mrs.	2	2	0
Neil, R. A.	2	2	0
Newman, W. L.	2	2	0
Paul, J. D.	1	1	0
Pawson, A. H.	2	2	0
Pelham, Hon. Mrs. Arthur	1	1	0
Perry, W. C.	1	1	0
Phillimore, Prof. J. S.	1	1	0
Pollock, Sir F.	1	1	0
Poynter, Sir E. J.	5	0	0
Rathbone, Mrs. F.	1	0	0
Rawlinson, W. G.	1	1	0
Reid, Dr.	1	1	0
Rendall, Dr. G. H.	1	1	0
Richards, H. P.	1	1	0
Robb, Mrs.	1	1	0
Roberts, Prof. W. Rhys	1	1	0
Sandys, Dr.	5	0	0
Seaman, Owen	1	1	0
Searle, G. von U.	1	0	0
Smith, R. A. H. Bickford	2	2	0
Stannus, Hugh	1	1	0
Stanton, C. H.	2	2	0
Stevenson, Miss	1	1	0
Tancock, Rev. C. C.	1	1	0
Teale, J. Pridgen	1	1	0
Thompson, Sir E. M.	3	3	0
Thompson, Sir H.	5	0	0
Thompson, F. E.	1	1	0
Thursfield, J. R.	1	1	0
Tozer, Rev. H. F.	10	0	0
Tuckett, F. F.	1	0	0
Tuke, Miss	1	1	0
Vaughan, E. L.	1	0	0
Verrall, Dr.	1	1	0
Waldstein, Dr.	1	1	0
Ward, John	1	0	0
Warr, Prof. G. C.	1	1	0
Warre, Rev. E.	1	1	0
Warren, T. H.	1	1	0
Weber, Sir H.	2	2	0
Wedgwood, G.	2	2	0
Wells, J.	1	1	0
Wernher, Julius	25	0	0
Westlake, Prof. and Mrs.	2	10	0
Wickham, Very Rev. E. C.	3	0	0
Wilson, R. D.	1	1	0
	£897	4	0

LIST OF SUBSCRIBERS.

NOTE. Under No. V. of the Rules and Regulations, "the following shall be considered as Subscribers to the School:—

(1) Donors of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.
(3) Corporate bodies subscribing £50 at one time, or £5 annually."

In making out the following list, donations of less than £10 have been regarded as aggregate annual subscriptions of £1, and are spread over a corresponding number of years.

The Treasurer would be glad to be informed of any changes of address or errors in this list.

HIS MAJESTY THE KING.
THE UNIVERSITY OF OXFORD.
THE UNIVERSITY OF CAMBRIDGE.
THE MCGILL UNIVERSITY, Montreal.
THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES, 22, Albemarle Street, W.
THE SOCIETY OF ANTIQUARIES, Burlington House, Piccadilly.
THE SOCIETY OF DILETTANTI (per E. H. Pember, Esq., K.C., 32, Great George Street, S.W.)
BRASENOSE COLLEGE, Oxford.
CHRIST CHURCH, Oxford.
CORPUS CHRISTI COLLEGE, Oxford.
KING'S COLLEGE, Cambridge.
MAGDALEN COLLEGE, Oxford.
NEWNHAM COLLEGE, Cambridge.
THE GREEK PLAY COMMITTEE (per J. W. Clark, Esq., Scroop House), Cambridge.
THE HON. COMPANY OF CLOTHWORKERS, Mincing Lane, E.C.

Abercrombie, J., Esq., M.D., 23, Upper Wimpole Street, W.
Adam, J., Esq., Emmanuel College, Cambridge.
Agg-Gardner, J. T., Esq., M.P., Carlton Club, Pall Mall, S.W.
Agnew, Sir William, Bart., 11, Great Stanhope Street, Park Lane.
Aitchison, G., Esq., A.R.A., 150, Harley Street, W.
Alexander, W. C., Esq., 24, Lombard Street, E.C.
Allbutt, Prof. T. Clifford, F.R.S., St. Rhadegunds, Cambridge.
Anson, Sir W. R. Bart., M.P., All Souls' College, Oxford.
Ashby, Thos., Esq., Hotel Russell, Russell Sq., W.C.
Austen-Leigh, E. C., Esq., Eton College.
Avebury, The Right Hon. Lord, High Elms, Farnborough, R.S.O.
Awdry, H., Esq., Wellington College, Wokingham.
Bailey, J. C., Esq., 20, Egerton Gardens, S.W.
Baker, Herbert, Esq., Castle Co. Buildings, Capetown.
Balfour, The Right Hon. G. W., M.P., Board of Trade, Whitehall Gardens, S.W.
Barlow, Sir T., Bart., M.D., 10, Wimpole Street, W.

Bather, Rev. A. G., 8, Kingsgate Street, Winchester.
Bodington, N., Esq., Litt.D., The Yorkshire College, Leeds.
Bosanquet, C. B. P., Esq., Rock Hall, Alnwick.
Bosanquet, R. C., Esq., British School, Athens.
Boyle, Miss Florence, c/o Dr. Eady, Inglaws Lodge, Enfield, N.
Brassey, The Right Hon. Lord, 4, Great George Street, S.W.
Brinton, Hubert, Esq., Eton College.
Brooke, The Rev. Stopford, 1, Manchester Square, W.
Brooks, E. W., Esq., 28, Great Ormond Street, W.C.
Burdett-Coutts, The Baroness, Holly Lodge, Hampstead.
Burnet, J. J., Esq., 167, St. Vincent Street, Glasgow.
Bury, Prof. J. B., Trinity College, Dublin.
Butcher, Professor, 27, Palmerston Place, Edinburgh.
Butler, The Very Rev. Dr., Master of Trinity College, Cambridge.
Buxton, A. F., Esq., 50, Cornhill, E.C.
Buxton, F. W., Esq., 50, Cornhill, E.C.
Buxton, H. E., Esq., Fritton, Great Yarmouth.
Bywater, Mrs., 93, Onslow Square, S.W.
Bywater, Prof. Ingram, 93, Onslow Square. S.W.

Campbell, The Rev. Prof. L., 33, Campden House Chambers, W.
Carlisle, Miss Helen, Houndhill, Marchington, Stafford.
Carr, H. Wildon, Esq., 25, Cumberland Terrace, Regent's Park, N.W.
Carr, Rear-Admiral, United Service Club, Pall Mall, S.W.
Carr, The Rev. A., Addington Vicarage, Croydon.
Caton, R. Esq., M.D., Lea Hall, Gateacre, Liverpool.
Chamberlain, The Right Hon. J., M.P., 40, Prince's Gardens, S.W.
Chamberlain, J. Austen, Esq., M.P., 40, Prince's Gardens, S.W.
Chambers, Colonel O., E. I. United Service Club, 16, St. James's Square, W.
Chawner, W., Esq., Master of Emmanuel College, Cambridge.
Clark, C. R., Esq., 20, Cowley Street, Westminster, S.W.
Clauson, A. C., Esq., 12, Park Place Villas, Paddington Green, W.
Colchester, The Right Hon. Lord, St. Bruno, Sunningdale.
Cole, A. C., Esq., 64, Portland Place, W.
Colvin, Sidney, Esq., British Museum, W.C.
Corbett, V., Esq., British Legation, Athens.
Cowper, The Right Hon. Earl, Panshanger, Hertford.
Cruddas, Miss, Haughton Castle, Humshaugh-on-Tyne, Northumberland.
Crum, Miss Jessie, Newnham College, Cambridge.
Cruse, D. A., Esq. (Librarian), Leeds Library, Commercial Street, Leeds.
Cust, Miss A. M., 63, Elm Park Gardens, S.W.

Dabis, Miss, c/o Mrs. Mond, 20, Avenue Road, Regent's Park, N.W.
Dakyns, H. G., Esq., Higher Coombe, Haslemere.
Darbishire, R. D. Esq., 1, St. James's Square, Manchester.
Darwin, Prof. G. H., F.R.S., Cambridge.
Davey, The Right Hon. Lord, 86, Brook Street, W.
Davidson, H. O. D., Esq., Harrow.
Deacon, W. S., Esq., Pointers, Cobham, Surrey.
Dilke, The Right Hon. Sir C. W., Bart., M.P., 76, Sloane Street, S.W.
Donaldson, The Rev. S. A., Eton College.
Durham, The Right Hon. The Earl of, 4, Cavendish Square, W.
Durnford, Walter, Esq., King's College, Cambridge.
Dyer, Louis, Esq., Sunbury Lodge, Banbury Road, Oxford.

Earl, A. G., Esq., Ferox Hall, Tonbridge.
Egerton, Sir E. H., K.C.B., H.B.M. Minister, British Legation, Athens.
Egerton, The Right Hon. Earl, 7, St. James's Square, S.W.
Elliot, Francis E. H., Esq., British Agency, Sofia.
Elliot, The Rev. F. R., British Legation, Athens.
Eumorfopoulo, N., Esq., 33, Gloucester Square, Hyde Park. W.
Evans, Arthur J., Esq., LL.D., F.R.S., Ashmolean Museum, Oxford.
Evans, Sir John, K.C.B., D.C.L., F.R.S., Nash Mills, Hemel Hempstead.
Ewart, Miss, 68, Albert Hall Mansions, S.W.

Farrer, Sir W. J., Sandhurst Lodge, Wellington College Station, Berks.
Fletcher, H. M., Esq., 10, Lincoln's Inn Fields, W.C.
Fletcher, John M., Esq., 9, Stanhope Street, Hyde Park, W.
Fort, J. A., Esq., 69, Kingsgate Street, Winchester.
Fowler, W. W., Esq., Lincoln College, Oxford.
Freshfield, D. W., Esq., 1, Airlie Gardens, W.
Freshfield, Dr. Edwin 31, Old Jewry, E.C.
Furneaux, L. R., Esq., Rossall School, Fleetwood.

Gardner, Prof. Ernest, University College, Gower Street, W.C.
Gardner, Prof. Percy, Litt.D., 12, Canterbury Road, Oxford.
Giveen, R. L., Esq., 66, Myddelton Square, E.C.

Gow, Rev. James, Litt.D., Dean's Yard, Westminster, S.W.
Graham, Alex., Esq., Carlton Chambers, 4, Regent Street, S.W.
Graham, E., Esq., Grove Hill, Harrow.
Griffith, F. Ll., Esq., Riversvale, Ashton-under-Lyne.

Haigh, A. E., Esq., 2, Crick Road, Oxford
Hallam, G. H., Esq., The Park, Harrow.
Hardy, Mrs., 1, Cadogan Square, S.W.
Harris, A., Esq., Wharfenden, Farnborough, Hants.
Harrison, Miss, LL.D., Newnham College, Cambridge.
Hart-Smith, The Rev. T. N., 3, Tamar Terrace, Launceston.
Hawes, Miss, 89, Oxford Terrace, W.
Haworth, Jesse, Esq., Woodside, Bowdon.
Hay, C. Anderson, Esq., 127, Harley Street, W.
Headlam, Walter, Esq., King's College, Cambridge.
Heberden, C. B., Esq., Principal of Brasenose College, Oxford.
Henderson, A. E. Esq., c/o Architectural Association, 58, Great Marlborough Street, W.
Hereford, The Right Rev. The Bishop of, The Palace, Hereford.
Hill, G. F., Esq., British Museum, W.C.
Hogarth, D. G., Esq., 23, Alexander Sq., S.W.
Hooper, G. N. Esq., Elmleigh, Beckenham, Kent.
Hornby, The Rev. Dr., Provost of Eton College, Windsor.

Irving, Sir Henry, Lyceum Theatre, W.C.
Iveagh, The Right Hon. Lord, 5, Grosvenor Place, S.W.

James, Rev. S. R., School House, Malvern.
James, The Rev. H. A., D.D., School House, Rugby.
Jebb, Prof. Sir R. C., Litt.D., M.P., Springfield, Cambridge.
Jenner, Miss, 39, Addison Road, W.
Johnston, C. E., Esq., 23, Queen's Gate Terrace, S.W.
Jones, H. Stuart, Esq., Trinity College, Oxford.

Kenyon, F. G., Esq., Litt.D., British Museum, W.C.
Keser, J., Esq., M.D., Villa St. Martin, Vevey, Switzerland.
King, Miss Catherine, Oxton, Birkenhead.
Knowles, James, Esq., Queen Anne's Lodge, St. James's Park, S.W.

Lambert, Dr. E. J., 106, Bismarckstrasse, Aachen, Germany.
Lascelles, B. P., Esq., Harrow.
Lawrence, Sir Edwin, Bart., M.P., 13, Carlton House Terrace, S.W.
Lawrence, The Misses, 4, Princes Gate, S.W.
Lawson, Sir E., Bart., *Daily Telegraph*, Fleet Street, E.C.
Leaf, Mrs. C. J., Beechwood, Tunbridge Wells.
Leaf, Walter, Esq., Litt.D., 6, Sussex Place, Regent's Park, N.W.
Lecky, Mrs., 38, Onslow Gardens, S.W.
Lewis, Mrs. S. S., Castle-brae, Cambridge.
Lindley, Miss Julia, 74, Shooter's Hill Road, Blackheath, S.E.
Lindley, W., Esq., M.Inst.C.E., 10, Kidbrook Terrace, Blackheath, S.E.
Lingen, The Right Hon. Lord, K.C.B., 13, Wetherby Gardens, S.W.
Lister, The Right Hon. Lord, P.R.S., 12, Park Crescent, Portland Place, W.
Llangattock, The Right Hon. Lord, The Hendre, Monmouth.
Lloyd, Miss A. M., Caythorpe Hall, Grantham.
Loring, Miss, 14, Montagu Street, Portman Square, W.
Loring, W., Esq., 2, Hare Court, Temple, E.C.
Lucas, Sir Thomas, Bart., 12a, Kensington Palace Gardens, W.
Lynch, H. F., Esq., 33, Pont Street, S.W.

Macan, R. W., Esq., University College, Oxford.
MacLehose, James J., Esq., 61, St. Vincent Street, Glasgow.
Macmillan, G. A., Esq., St. Martin's Street, W.C.
Macmillan, Messrs., & Co., Ltd., St. Martin's Street, W.C.
Marindin, G. E., Esq., Broomfields, Farnham, Surrey.
Markby, A., Esq., Copse Hill, Wimbledon.
Mayor, R. J. G., Esq., Board of Education, Whitehall, S.W.
Miller, The Rev. Alex., South United Free Church Manse, Buckie, N.B.
Mitchell, C. W., Esq., 195, Queen's Gate, S.W.
Mocatta, F. D., Esq., 9, Connaught Place, Edgware Road, W.
Mond, Ludwig, Esq., F.R.S., 20, Avenue Road, Regent's Park, N.W.
Monk, The Misses, 4, Cadogan Square, S.W.
Monro, D. B., Esq., Provost of Oriel College, Oxford.
Monson, His Excellency the Right Hon. Sir E., G.C.B., G.C.M.G., British Embassy, Paris.
Montagu, Sir S., Bart., M.P., 12, Kensington Palace Gardens, S.W.
Montefiore, C. G., Esq., 12, Portman Square, W.
Morley, The Right Hon. The Earl of, 31, Prince' Gardens, S.W.
Morley, Howard, Esq., 47, Grosvenor Street, W.
Morshead, E. D. A., Esq., Grafton Villa, Winchester.
Murray, Messrs. J. & H., 50, Albemarle Street, W.
Murray, Prof. G. G. A., Barford, Churt, Farnham, Surrey.
Myers, Ernest, Esq., Brackenside, Chislehurst.

Mylne, Mrs., 83, Gloucester Terrace, Hyde Park, W.
Myres, J. L., Esq., Christchurch, Oxford.

Newman, W. L., Esq., 1, Pittville Lawn, Cheltenham.

Oswald, J. W. Gordon, Esq. (of Aigas), Beauly, Inverness-shire, N.B.

Paton, W. R., Esq., British Post Office, Smyrna.
Paul, J. D., Esq., Town End Close, Knighton, Leicester.
Pawson, A. H., Esq., Farnley, Leeds.
Pears, E., Esq., 2, Rue de la Banque, Constantinople.
Pelham, Prof. H. F., President of Trinity College, Oxford.
Pelham, The Hon. Mrs. Arthur, 15, Duke Street, Manchester Square.
Penrose, F. C., Esq., F.R.S., Colebyfield, Wimbledon, S.W.
Perry, W. C., Esq., 5, Manchester Square, W.
Pesel, Miss Laura, Oak House, Bradford, Yorks.
Phillimore, Prof. J. S., 5, The University, Glasgow.
Plumbe, Rowland, Esq., 13, Fitzroy Square, W.
Pollock, Sir F., Bart., 48, Great Cumberland Place, W.
Poynter, Sir E. J., P.R.A., 28, Albert Gate, S.W.

Ralli, Mrs. S., 32, Park Lane, W.
Ralli, P., Esq., 17, Belgrave Square, W.
Rathbone, Mrs. F., Ladywood, Sutton-Coldfield.
Rawlinson, W. G., Esq., Hill Lodge, New Road, Campden Hill, W.
Reid, Prof. J. S., Litt.D., Caius College, Cambridge.
Rendall, The Rev. G. H., Litt.D., Charterhouse, Godalming.
Richards, H. P., Esq., Wadham College, Oxford.
Richmond, The Right Rev. The Bishop of, the Rectory, Stanhope R.S.O., Co. Durham.
Robb, Mrs., 46, Rutland Gate, S.W.
Roberts, Prof. W. Rhys, University College, Bangor.
Rosebery, The Right Hon. the Earl of, K.G., The Durdans, Epsom.
Rothschild, The Right Hon. Lord, 148, Piccadilly, W.
Rothschild, Messrs. N. M.,and Sons, New Court, E.C.
Rothschild, The Hon. Walter, 148, Piccadilly, W.
Rumbold, His Excellency Sir Horace, Bart., G.C.B., British Embassy, Vienna.

Salisbury, The Most Hon. the Marquis of, K.G., Arlington Street, W.
Sandys, J. E., Esq., Litt.D., St. John's College, Cambridge.
Saumarez, The Right Hon. Lord de, Shrubland Park, Coddenham, Suffolk.
Scott, C. P., Esq., The Firs, Fallowfield, Manchester.
Seaman, Owen, Esq., Tower House, Putney, S.W.
Searle, G. von U., Esq., 30, Edith Road, West Kensington, W.
Sharkey, J. A., Esq., Christ's College, Cambridge.
Shove, Miss E., 25, St. Martin's Crescent, Regents Park, N.W.
Simpson, W. W., Esq., Winkley, Whalley.
Smith, Cecil H., Esq., LL.D., British Museum, W.C.
Smith, Mrs. C. H., 18, Earl's Terrace, Kensington, W.
Smith, J. G., Esq., 4, Wilton Street, Grosvenor Place, S.W.
Smith, R. A. H. Bickford, Esq., 29, Ladbroke Grove, W.
Southwell, The Right Rev. the Bishop of, Thurgarton Priory, Notts.
Spring-Rice, S. E., Esq., C.B., Treasury, Whitehall, S.W.
Stannus, Hugh, Esq., 64, Larkhall Rise, Clapham, S.W.
Stanton, C. H., Esq., Field Place, Stroud.
Steinkopff, E., Esq., 47, Berkeley Square, W.
Stevenson, Miss E. C., 13, Randolph Crescent, Edinburgh.
Sullivan, John, Esq., Reform Club, Pall Mall, S.W.

Tadema, Sir L. Alma, R.A., 17, Grove End Road, N.W.
Tancock, The Rev. C. C., The School, Tonbridge.
Taylor, The Rev. Dr., Master of St. John's College, Cambridge.
Taylor, J. E., Esq., 20, Kensington Palace Gardens, W.
Teale, J. Pridgin, Esq., F.R.S., 38, Cookridge Street, Leeds.
Thompson, Sir E. M., K.C.B., British Museum, W.C.
Thompson, Sir Henry, Bart., 35, Wimpole Street, W.
Thompson, H. Y., Esq., 19, Portman Square, W.
Thompson, F. E., Esq., 16, Primrose Hill Road, N.W.
Thursfield, J. R., Esq., Fryth, Great Berkhampstead.
Tozer, The Rev. H. F., 18, Norham Gardens, Oxford.
Tuckett, F. F., Esq., Frenchay, Bristol.
Tuke, Miss Margaret, Newnham College, Cambridge.

Vaughan, H., Esq., 28, Cumberland Terrace, Regent's Park, N.W.

Vaughan, E. L., Esq., Eton College.
Verrall, A. W., Esq., Litt.D., Selwyn Gardens, Cambridge.

Waldstein, Charles, Esq., Litt.D., King's College, Cambridge.
Wandsworth, The Right Hon. Lord, 10, Great Stanhope Street, W.
Wantage, The Lady, 2, Carlton Gardens, S.W.
Ward, John, Esq., F.S.A., Lenoxvale, Belfast.
Warre, The Rev. E., D.D., Eton College, Windsor.
Warren, T. H., Esq., President of Magdalen College, Oxford.
Waterhouse, Edwin, Esq., Feldemore, near Dorking.
Weber, Sir. H., M.D., 10, Grosvenor Street, W.
Wedgwood, G., Esq., Idle Rocks, Stone, Staff.
Wells, J., Esq., Wadham College, Oxford.
Wernher, Julius, Esq., 82, Piccadilly, W.
West, H. H., Esq., c/o R. W. West, Esq., Casa Bianca, Alassio, N. Italy.
Westlake, Mrs., 3, Chelsea Embankment, S.W.
Whateley, A. P., Esq., 4, Southwick Crescent, W.
Wickham, The Very Rev. E. C., The Deanery, Lincoln.
Wilson, R. D., Esq., 38, Upper Brook Street, W.
Wimborne, The Right Hon. Lord, 22, Arlington Street, S.W.
Winkworth, Mrs., Holly Lodge, Campden Hill, W.
Wroth, Warwick, Esq., British Museum, W.C.

Yates, Rev. S. A. Thompson, 43, Phillimore Gardens, W.
Yorke, V. W., Esq., Forthampton Court, Tewkesbury.
Yule, Miss A., Tarradale House, Ross-shire Scotland.

DIRECTORS OF THE SCHOOL.

1886—1901.

F. C. PENROSE, M.A., D.C.L., LL.D., F.R.S., 1886—1887.
ERNEST A. GARDNER, M.A., 1887—1895.
CECIL H. SMITH, LL.D., 1895—1897.
DAVID G. HOGARTH, M.A., 1897—1900.
R. CARR BOSANQUET, M.A., 1900—

STUDENTS OF THE SCHOOL.

1886—1901.

Ernest A. Gardner,	Formerly Fellow of Gonville and Caius College, Cambridge, and Craven University Student. Admitted 1886—87, Director of the School, 1887—1895. Yates Professor of Archaeology at University College, London.
David G. Hogarth,	Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88.
Rupert Clarke,	Exeter College, Oxford. Admitted 1886—87.
F. H. H. Guillemard,	Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
Montague R. James,	Fellow and Tutor of King's College, Cambridge ; Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University.
R. Elsey Smith,	Professor of Architecture and Construction, King's College, London. Appointed to Studentship by Royal Institute of British Architects, 1887—88.
Robert Weir Schultz,	Admitted as Travelling Student and Gold Medallist of the Royal Academy, 1887—88. Re-admitted 1888—89, 1889—90.
Sidney H. Barnsley,	Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91.
J. A. R. Munro,	Fellow and Tutor of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.

H. Arnold Tubbs,	Pembroke College, Oxford; Craven University Fellow. Professor of Classics in the University of Auckland. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
James G. Frazer,	Fellow of Trinity College, Cambridge. Admitted 1889—90, with grant of £100 from the University of Cambridge to collect material for commentary on Pausanias.
William Loring,	Late Fellow of King's College, Cambridge. Examiner in the Board of Education. Secretary of the School since 1897. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93.
W. J. Woodhouse,	Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrew's. Appointed to Oxford Studentship, 1889—90. Re-admitted as Craven University Fellow, 1891—92 and 1892—93.
G. C. Richards,	Late Fellow of Hertford College; Lecturer at Oriel College, Oxford. Formerly Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889—90. Re-admitted 1890—91.
O. H. Parry,	Magdalen College, Oxford. Archbishop's Missioner to the Nestorian Christians. Admitted 1889—90.
J. R. Stainer,	Magdalen College, Oxford. Admitted 1889—90.
R. A. H. Bickford-Smith,	Trinity College, Cambridge. Admitted 1889—90.
A. G. Bather,	Late Fellow of King's College, Cambridge; Assistant Master at Winchester College. Admitted 1889—90. Re-admitted 1891—92, on appointment to the Cambridge Studentship 1892—93 as Prendergast Greek Student; and again, 1893—94, as Cambridge Student.
. E. Sikes,	Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890—91.
J. G. Milne,	Corpus Christi College, Oxford. Examiner in the Board of Education. Appointed to Oxford Studentship, 1890—91.
H. Stuart Jones,	Fellow and Tutor of Trinity College, Oxford. Admitted as Craven University Fellow, 1890—91. Re-admitted 1892—93.
Miss Eugénie Sellers,	Admitted 1890—91. (Mrs. S. Arthur Strong.)
F. B. Baker,	Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891—92.
C. C. Inge,	Magdalen College, Oxford. Appointed 1891—92 to the Oxford Studentship.
E. F. Benson,	King's College, Cambridge. Admitted 1891—92, with grant of £100 from the Worts Fund at Cambridge; 1892—93 on appointment to the Cambridge Studentship. 1893—94 as Craven Student; and 1894—95 as Prendergast Student.
J. G. Smith,	Magdalen College, Oxford. Admitted 1891—92. Re-admitted 1895—96.
V. W. Yorke,	Late Fellow of King's College, Cambridge. Admitted 1892—93. Re-admitted 1893—94.

L. Myres,	Student and Lecturer of Christ Church, and late Fellow of Magdalen College, Oxford. Admitted 1892—93. Re-admitted 1893—94, and 1894—95 as Craven Fellow.
R. J. G. Mayor,	Fellow of King's College, Cambridge, and Examiner in the Board of Education. Admitted 1892—93.
R. Carr Bosanquet,	Trinity College, Cambridge. Assistant Director of the School, 1899—1900. Director since 1900. Admitted 1892—93. Re-admitted as Craven University Student 1894—95, 1895—96, and 1896—97.
J. M. Cheetham,	Christ Church, Oxford. Admitted on appointment to the Oxford Studentship. 1892—93.
E. R. Bevan,	New College, Oxford. Admitted 1893—94.
A. F. Findlay,	Sent out from Aberdeen by the United Presbyterian Church of Scotland. Admitted 1894—95.
T. Duncan,	Sent out from Aberdeen by the Church of Scotland. Admitted 1894—95.
J. E. Brooks,	St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97.
H. Awdry	New College, Oxford. Assistant Master at Wellington College. Admitted 1894—95.
Duncan Mackenzie,	Universities of Edinburgh and Vienna. Admitted 1895—6. Re-admitted 1896—7, 1897—8 and 1898—9.
Archibald Paterson,	University of Edinburgh. Admitted 1895—96.
Charles R. R. Clark,	Appointed 1895—96, and re-appointed 1896—97 by the Managing Committee to an Architectural Studentship.
C. C. Edgar,	Oriel College, Oxford. English Member of the Cataloguing Committee, Ghizeh Museum. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—9.
F. R. Earp,	Fellow of King's College, Cambridge. Admitted 1896—97.
F. A. C. Morrison,	Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97.
H. H. West,	Trinity College, Cambridge. Admitted 1896—97.
Miss C. A. Hutton,	Girton College, Cambridge. Admitted 1896—97.
Pieter Rodeck,	Architect to Arab Monuments Committee, Cairo. Admitted 1896—97 as Travelling Student and Gold Medallist of the Royal Academy.
J. G. C. Anderson,	Late Fellow of Lincoln College, Student and Lecturer of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896—97.
J. W. Crowfoot,	Hulmean Exhibitioner of Brasenose College, Oxford. Education Department, Cairo. Formerly Lecturer in Classics, Mason College, Birmingham. Admitted, on appointment to the Oxford Studentship, 1896—97. Re-admitted 1897—98.
W. W. Reid,	Universities of Aberdeen and Edinburgh. Admitted, as holder of Blackie Travelling Scholarship, 1896—97.
A. E. Henderson,	Gold Medallist and Travelling Student of the Royal Academy. Admitted 1897—98. Re-admitted 1898—9.

W. A. Curtis,	Heriot Scholar of Edinburgh University. Admitted 1897—98.
A. J. Spilsbury,	Queen's College, Oxford. Admitted 1897—98, on appointment to the Oxford Studentship.
E. B. Hoare,	Magdalen College, Oxford. Admitted 1897—98, as Architectural Student.
J. C. Lawson,	Fellow and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898—9. Re-admitted 1899—1900.
C. D. Edmonds,	Emmanuel College, Cambridge. Assistant Master at Elstree School. Admitted as Prendergast Student, 1898—9.
J. H. Marshall,	King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted, 1898—9. Re-admitted as Prendergast Student, 1900—01.
Clement Gutch,	King's College, Cambridge. Lecturer at Girton College. Admitted, 1898—9.
F. B. Welch,	Magdalen College, Oxford. Assistant Master at Pocklington School. Admitted as Craven University Fellow, 1898—9. Re-admitted 1899—1900.
T. D. Atkinson,	Secretary of Cambridge Antiquarian Society. Admitted as Architectural Student, 1898—9.
J. K. Fotheringham,	Merton and Magdalen Colleges, Oxford. Admitted on appointment to Oxford Studentship, 1898—9.
J. H. Hopkinson,	University College, Oxford. Lecturer in Greek, University of Birmingham. Admitted as Craven University Fellow, 1899—1900 and 1900—01.
S. C. Kaines-Smith,	Magdalene College, Cambridge. Admitted 1899—1900, on appointment to Cambridge Studentship.
Miss O. C. Köhler,	Girton College, Cambridge. Admitted 1899—1900.
D. Theodore Fyfe,	Admitted 1899—1900, on appointment to Architectural Studentship. Architect to the Cretan Exploration Fund.
K. T. Frost,	Brasenose College, Oxford. Admitted on appointment to the Oxford Studentship, 1900—01.
R. D. Wells,	Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900—01.
J. ff. Baker-Penoyre,	Keble College, Oxford. Admitted 1900—01.

ASSOCIATES OF THE SCHOOL.

Professor J. B. Bury,	Trinity College, Dublin. Admitted 1895—6.
Rev. A. H. Cruickshank,	The College, Winchester. Admitted 1895—6.
Arthur J. Evans,	Keeper of the Ashmolean Museum, Oxford. Admitted 1895—6.
Ambrose Poynter,	Admitted 1896—7.
J. E. Brooks,	A former Student of the School. Admitted 1896—7.
J. L. Myres,	Student of Christ Church, Oxford; a former Student of the School. Admitted 1896—7.
Professor E. A. Gardner,	Formerly Director of the School. Admitted 1897—8.

British School at Athens.

METHODS OF WORK AND TEACHING.

Extracted from a recent report of the present Director to the Managing Committee.

UNDER an ideal system most students would spend two, some three, seasons in Greece, devoting *the first year to general studies, the second to some special subject.*

During the first year a man need not lose sight of his special subject, but in most cases it would pay him to adopt something like the following programme :

[August and] *September.* In Berlin (Munich, Dresden) to become familiar with spoken German and so be able to profit by some of the 3 or 4 courses of lectures given by the Secretaries of German and Austrian Institutes.

October. Arrive in Greece. Face the difficulties of language and travelling. See Olympia, Delphi, Mycenae, Epidaurus, the Heraeum near Argos, before the rains begin in November.

About *November* 15. Settle down in Hostel for 3 or 4 months of steady work on sites and in Museums, attending some of the half-dozen available courses of lectures, and making frequent short excursions into the country, by train, bicycle, carriage, or on mule-back. A bicycle is invaluable.

This residence in the Hostel, with occasional absences for a few nights in the country, should last until the beginning or middle of March according to the season.

March, April. Travel, study ancient sites.

If possible join one of the island-cruises to which Professor Gardner and Professor Dörpfeld have hospitably admitted students in the past.

May, June. Begin to concentrate attention on special work : *e.g.* a man may assist in excavations, with a view to working upon the results during the coming year and excavating with more or less complete control or independence in his second summer : or he may explore a given district in Greece or Asia Minor, an island or group of islands : or he may work his way homewards through a number of Museums in Italy, Austria and Germany : or attend Mau's summer-course of lectures at Pompeii and afterwards spend some months in Rome and the cooler Etruscan cities. In the latter case he will do well to attach himself to the newly founded British School at Rome ; a library is being formed in the rooms of the School in the Odescalchi Palace, and Mr. G. McN. Rushforth, the Director, is ready to aid and advise students.

For the *second year* it is impossible to formulate a definite scheme. It should be devoted almost entirely to special work in a narrower field.

The course here suggested must be modified in different ways to suit each case. There will always be men who, like most of the French students, are already specialists in some branch of classical learning and only seek fresh material for research. On the other hand there will be others who wish to see something of all sides of ancient life, to visit sites and battle fields, illuminating and colouring their past reading and fitting themselves for general classical teaching : but have no time for minute archaeological studies.

It is evident that in each year the methods and matter of the teaching at the School must be adapted to the requirements of the students. Students from English universities will never have the love of formal lectures which distinguishes those from America, and where the numbers are small it will often be better to teach, as Dr. Wolters has been in the habit of doing, by means of informal visits to sites and Museums.

February 1901.

RULES AND REGULATIONS

OF THE

BRITISH SCHOOL AT ATHENS.

OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archæology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archæology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archæological and other suitable books, including maps, plans, and photographs.

THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School :—

(1) Donors of £10 and upwards.
(2) Annual Subscribers of £1 and upwards during the period of their subscription.
(3) Corporate bodies subscribing £50 at one time or £5 annually.

VI. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring, under Rule XIII. (3).

VIII. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

IX. Subscribers shall be entitled to receive a copy of any reports that may be published by the School, to use the Library, and to attend the public meetings of the School, whenever they may be in Athens.

THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit, or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following :—

(1) The Trustees of the School.
(2) The Treasurer and Secretary of the School.
(3) Twelve Members elected by the Subscribers at the annual meetings. Of these, four shall retire in each year, at first by lot, afterwards by rotation. Members retiring are eligible for re-election.
(4) The members nominated by corporate bodies under Rule VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months; but the Secretary or Treasurer may, with the approval of two members of the Committee, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

STUDENTS AND ASSOCIATES.

XIX. The Students shall consist of the following :—

(1) Holders of travelling fellowships, studentships, or scholarships at any University of the United Kingdom or of the British Colonies.

(2) Travelling Students sent out by the Royal Academy, the Royal Institute of British Architects, or other similar bodies.

(3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

No person shall be admitted as a Student who does not intend to reside at least three months in Greek lands.

XX. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXI. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXII. The Managing Committee may elect as Associates of the School any persons actively engaged in study or exploration in Greek lands; and may also elect as honorary members such persons as they may from time to time think desirable.

XXIII. Students, Associates, and honorary members, shall have a right to use the Library of the School, and to attend all lectures given in connexion with the School, free of charge.

XXIV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXV. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVI. He shall have possession of the school-building as a dwelling-house; but Students of the School shall have a right to the use of the Library at all reasonable times.

XXVII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XX., and placed in the hands of the Secretary before the end of June; (2) to act as Editor of the School Annual.

XXVIII. (*a*) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (*b*) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXIX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXX. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXI. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

RULES FOR THE MACMILLAN HOSTEL.

XXXIII. The Hostel shall be managed by the Students for the time being, subject to the control of the Director.

XXXIV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXV. The Students shall, until further notice, pay a fixed charge of 20 drachmas (paper) a week for their rooms, this payment to include fire, lighting, and the necessary servants' wages.

XXXVI. Associates of the School, members of the Committee, and ex-directors, may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVII. The weekly charge for residents other than Students shall be 30 drachmas (paper) until further notice.

XXXVIII. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

RULES FOR THE LIBRARY.

XXXIX. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

PUBLICATION.

XL. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

THE FINANCES.

XLI. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIII. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLIV. The second claim shall be the salary of the Director, as arranged between him and the Managing Committee.

XLV. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

Revised, 1899.

MANAGING COMMITTEE, 1901—1902.

EDWIN FRESHFIELD, ESQ., LL.D.
SIR RICHARD JEBB, Litt.D., D.C.L., LL.D., M.P. } *Trustees.*
GEORGE A. MACMILLAN, ESQ.

D. B. MONRO, ESQ., M.A., Provost of Oriel. Appointed by the University of Oxford.
PROFESSOR WILLIAM RIDGEWAY, M.A. Appointed by the University of Cambridge.
SIDNEY COLVIN, ESQ., M.A. Appointed by the Hellenic Society.

ARTHUR J. EVANS, ESQ., LL.D., F.R.S.
PROFESSOR ERNEST GARDNER, M.A.
PROFESSOR PERCY GARDNER, Litt.D.
MISS JANE E. HARRISON, D.Litt., LL.D.
F. HAVERFIELD, ESQ., M.A.
D. G. HOGARTH, ESQ., M.A.
J. LINTON MYRES, ESQ., M.A.
PROFESSOR H. F. PELHAM, M.A., President of Trinity College, Oxford.
F. C. PENROSE, ESQ., LL.D., D.C.L., F.R.S.
CECIL HARCOURT SMITH, ESQ., LL.D.
PROFESSOR J. S. REID, Litt.D.
PROFESSOR CHARLES WALDSTEIN, Litt.D.
} Appointed by the Subscribers.

WALTER LEAF, ESQ., Litt.D., *Hon. Treasurer*, 6, Sussex Place, Regent's Park, N W.
WILLIAM LORING, ESQ., M.A., *Hon. Secretary*, 2, Hare Court, Temple, E.C.

Director, 1901—1902.

R. CARR BOSANQUET, ESQ., M.A., Trinity College, Cambridge.

British School at Athens.

THIS School (founded in 1886) gives to British Students of Greek Archaeology and Art the opportunity of pursuing their researches in Greece itself, with command of the means which the recent great advances of the science have rendered indispensable.

Athens is now an archaeological centre of the first rank. The architecture of Greece can nowhere else be studied to such advantage; and the concentration in the Athenian museums of numerous and most important discoveries which have taken place on Greek soil in the last few years has made a personal knowledge of those museums in the highest degree desirable for Hellenic scholars.

The student requires two auxiliaries when working in Athens. Firstly, the command of an adequate library; and secondly, the advice of a trained archaeologist, residing on the spot, and following the rapid advances of the science, due partly to new discovery and partly to the rearrangement of old materials.

These advantages are now provided for French, German, Austrian, American, and British archaeologists, through the Schools which their nationalities have established. It is also by means of these Schools that many excavations on Greek soil have been carried out; and those conducted in Cyprus, in the Peloponnese, in Melos and in Crete by the British School during the past fifteen Sessions are an encouraging proof of the work that may be done in the future if the School be adequately supported.

Any persons of British nationality who can give satisfactory proof of their qualifications are admitted as students free of charge. The principal conditions imposed are that they shall pursue some definite course of Hellenic study or research, residing for the purpose not less than three months in Greek lands, and that they shall at the end of the Session write a report of the work which they have done. Applications from intending students should be made to the Hon. Sec., WILLIAM LORING, Esq., 2, Hare Court, Temple, E.C. Mr. LORING will also be happy to supply any further information.

Donations or annual subscriptions to the School are greatly needed, and will be gladly received and acknowledged by the Hon. Treasurer, WALTER LEAF, Esq., 6, Sussex Place, Regent's Park, N.W.

April 1902.

RICHARD CLAY AND SONS, LIMITED,
LONDON AND BUNGAY.